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BALTIMORE, APRIL 12, 1900.

A Labor of Love.

In the midst of its material advancement the South should not forget its ideals. Minds occupied with money-making are prone to neglect or forget the nobler purposes of life, not born of wealth, but capable of greater enjoyment through wealth. Movements intended to perpetuate the memory of great men of the South and the cultivation of the spirit which makes life worth living have been hampered in the past by poverty. The prosperity which has come to the section makes it possible for such plans to be carried rapidly to success. One of them which commends itself particularly contemplates the preservation of the Chandler property near Guinea Station, on the Richmond, Fredericksburg & Potomac Railroad, on which stands the house where Stonewall Jackson died, as a memorial of the great military leader. The immediate surroundings of the house, visible to travelers along the road, are enough to make Southern men ashamed. To remove the eyesore the Stonewall Jackson Memorial Association was chartered by the last legislature of Virginia for the purpose of securing funds with which to purchase and improve the property. Its president is Dr. Hunter McGuire of Richmond, Va., who was the surgeon of the Stonewall brigade. The treasurer is Mr. E. D. Hotchkiss of Richmond, Va., an official of the Chesapeake & Ohio Railway and a nephew of Major Jed. Hotchkiss, Jackson's chief of engineers, and the secretary is Mr. J. T. McAllister of Hot Springs, Va. Another member of the executive committee is Rev. Dr. James P. Smith, the gallant aide who, after Jackson had been wounded, protected him from the fire of the Union troops by lying between him and the Union forces on the battlefield.

Among the incorporators are Col. Charles Marshall of General Lee's staff, Major Richard M. Venable, Skipwith Wilmer of Baltimore, Col. H. Kyd Douglass of Maryland, ex-Governor William A. MacCorkle, Rev. Dr. A. C. Hopkins, John Mitchell of West Virginia, Joseph G. Morrison of North Carolina, Yates Snowden of South Carolina, L. T. D. Quinby of Georgia, Judge F. T. Nicholls of Louisiana, John H. Leathers of Kentucky, Leigh Robinson of the District of Columbia,

Major A. G. Pendleton, United States Senator Daniel, Hon. J. Taylor Ellyson, Governor Tyler, Judge George L. Christian, Carlton McCarthy and a host of other well-known Virginians. The association has obtained an option upon the house and about 160 acres of land for \$5000, and it is estimated that another \$5000 will be needed to put the property in repair and to provide a fund, the interest of which will pay taxes and keep the property in good condition. Checks made payable to Mr. E. D. Hotchkiss, treasurer, should be sent to the secretary, J. T. McAllister, Hot Springs, Bath county, Virginia.

The work being done by the association is a labor of love. No one connected with it will receive any commission or profit of any kind. The plan should meet the prompt and generous response from the wealthy men of the South.

A Hint from Italy.

The growth of the Italian cotton-manufacturing industry has caused a corresponding increase in the importation of raw material. Cotton-growers and cotton manufacturers will, therefore, be interested in figures presented by William Jarvis, United States consul at Milan, showing the origin of the raw material and the destination of the manufactured products. Since 1871, according to Dr. Leopoldo Sabbatini, secretary of the Milan Chamber of Commerce, the importations of raw cotton into Italy have increased from 10,500 tons to 132,900 tons in 1898. In the same time the importations of spun cotton have decreased from 13,600 tons to 700 tons, and the export of cotton textiles has increased from 135 tons to 11,900 tons. There has been a steady advance in the quantity and in the proportion of raw cotton imported from the United States. In 1894 of a total of 119,673 tons imported 54,328 tons came from the United States, 38,138 from India, 16,641 from Egypt and 10,566 from all other countries. In 1898 the total importations were 132,858 tons, of which 93,055 tons came from the United States, 25,072 from India, 6222 from Egypt, 8508 from all other sources. Italy exports spun cotton principally to Turkey, Argentine, Brazil and Roumania. The chief exports of cotton textiles is to Central and South America, 7731 tons of a total of 11,895 tons exported in 1898 going to the Latin-Americas. The question naturally arises, is it not possible for American cotton-growers to make an effort to send these countries goods manufactured in the South, and thus enjoy the benefits derived from the saving in the shipment of the raw material across the Atlantic to Italy and its reshipment to the Western Hemisphere in the shape of manufactured goods? This is already being done to a considerable extent, but it would be greatly aided by the development of our merchant marine giving regular steamer lines to all Central and South American countries.

THE BEST IS STILL AHEAD!

The average man, in fact, ninety-nine out of a hundred men, take them as they run, would, if called on for an off-hand expression of opinion, say that the flush times, the days of golden opportunities, the days when a man could most surely and rapidly "grow up with the country," were of the past; that the opportunities given to the people of the United States, and to those who came here from abroad, by the settlement and upbuilding of the Northern States lying between the Alleghanies and the Rocky mountains—the "Great West," as it is familiarly and affectionately called—could never be equaled hereafter in the United States, or in any part of the world. Yet that opinion would be dead wrong—as wrong as possible.

And let no one underestimate the opportunities which the West has given to the past two generations. They were greater than any heretofore recorded. They resulted in the greatest movement of mankind known to history, in the greatest success ever achieved anywhere in any age, and in a creation of wealth and an advancement of civilization in half a dozen decades that no preceding half-dozen centuries could match. This is a progressive age; the United States leads the procession, and can easily outmarch any other nation. Not that we are smarter or more industrious, but because nature has more richly endowed our land than any other. Our necessities have taught us a knowledge of our resources.

The great movement from Europe to America came as a result of the beginning of the industrial era which is now in such magnificent swing all over the world, and particularly in this country. When populations began to center in manufacturing cities and towns, and particularly when Great Britain set out to do the manufacturing and shopkeeping of the world, the first cry was for cheap food for the people in industrial centers. Home farmers, with high-priced land and high-priced labor, could not compete with low-priced land and labor elsewhere. Farming ceased to pay. The same movement went on in the countries of continental Europe. So vast hordes of laboring people came here. They took up the rich lands of the West, farmed, built railroads, dug canals and had a hard time of it. But they left to their descendants a magnificent heritage, and the West today is the best built up large area in the world, if the people as well as the works they have constructed are taken into account.

But we can beat even that. The first half of the twentieth century will advance wealth per capita in a greater ratio than the last half of the nineteenth. That is big talk, but it will pan out. And it will be a vastly easier job, too.

Take the case of the South—any part of it either east or west of the Mississippi. But perhaps one word at a time is enough. Take the older half, east of the Father of Waters. Compare its chances for fifty years ahead with those of the West since 1850, and it will be found that they are as much greater as our institutions of today are larger and more complex than those of fifty years ago.

If the farmer of the North or from Europe goes South, anywhere from Virginia to Florida, from Florida to Texas, or from the Ohio or the Missouri to the Gulf, he finds that he can raise, for his own subsistence and with less work, a greater variety of food; that he can raise to sell, and at better prices than in the North, not only hog and hominy, but garden truck, which, in spite of carrying charges, will bring more money because of its earlier production than it would bring in the North.

As a rule, movements of men are along lines of latitude, seeking conditions that are familiar. But one thing the civil war did for both sides. It got men of the North and South pretty promiscuously mixed up, and they afterward found out each about the other's country. It was a great educator, was the "late unpleasantness," and in no sense better than in starting movements along lines of longitude.

But when it comes to exchanging the products of the soil, that naturally comes along lines of longitude. The difference in climate, the early season of one part and the late season of another, all make for trade. And in this trade the early-season country has the best end.

The railroads of the South are a new and improved proposition compared with past years. The farmer of the South from this on will have growing advantages in Northern markets. But a still more rapidly-growing advantage is in home markets.

The South is endowed as is no other country in the world with materials upon which to found the greatest variety of industries, and with conditions which favor industries of the highest class.

Coal, as representing cheap power, and iron, as representing cheap machinery, whether it be in wheels in a mill or a locomotive or the rails over which the locomotive hauls trains, are the great fundamentals of modern energy applied to the creation of wealth.

Nowhere else in the world can good coal be mined or iron or steel be made at so low a cost as in the Southern States. This has been demonstrated. The coal lies in the earth so accessible that a third of the work necessary in England will bring the coal to the breaker in this country. And iron lies alongside

the coal. Pig-iron is giving way to steel billets. Billets will become rails, bars, plates, angles. Later on tools and cutlery and all the higher forms of iron and steel can be made.

With cheap power and cheap machinery the wonderfully varied mineral wealth of the South can be worked up.

So can the enormous wealth of timber.

As for cotton mills, the South is moving rapidly. But by and by the mountain gorges of the Western Carolinas and Virginia and of East Tennessee will hold cotton mills wherein, because of a steady humidity of the atmosphere, finer fabrics than Manchester or France or India or New England ever dreamed of can be made.

The South is really only in the pioneer stage of cotton manufacture, in iron and steel, in woodwork, in brick, tiles, pottery, porcelain, glass, metal-work, chemicals and industrial products of all sorts. But she has a foundation for wonderful variety and unlimited quantity of industrial production, and at a lower cost than other parts of the world can hope for. That being true, the world will seek out her wealth. Capital will follow the scientific and skillful labor that will be attracted by the natural wealth as it becomes known. The South cannot do better than back every man of ability and integrity who comes along with knowledge, skill and industry to turn to account any part of the natural wealth of the land. Every little shop that prospers grows to a big one and draws population of the most desirable kind, intelligent, industrious, capable of great production of wealth from natural resources.

It is population that does the trick. Get population, and, as the Hoosier says, "git a plenty while you're gittin'." An old man of ninety in New York owns a little corner on Wall street and Broadway, covered by a tumble-down old building, mostly vacant, and the income from which probably does not more than pay taxes. The owner is waiting for \$500 per square foot. He or his heirs will get it before long. That price means \$21,780,000 per acre for land! That's an extreme case of population.

But the South will hold a much denser population on its farm lands than the North, whose grains and grasses make the great principal crops.

The industrial area of the South—the mountain country—will sustain as dense a population as any region in the world. The limit it could sustain and profitably employ in perpetuity would be not less than 75,000,000. With a fourth of that number, yes, with a tenth employed in working up its wealth, land in every State south of the Potomac and Ohio would be worth more than in any Northern State, either now or then.

This is an era of world-wide industrial activity. The industries of the world are being rebuilt and enlarged. The United States already lead. Their productive capacity exceeds that of Great Britain and Germany combined. Their foundation of natural wealth far exceeds that of all Europe combined. Their surplus for export within the next ten or fifteen years will exceed that of all Europe.

That part of the United States in which the lowest cost of production has been reached in coal, iron and cotton is the South. The list can be extended until it embraces nearly all the great staples of commerce. How long can it be, therefore, with demand crowding production, before the rich fields of the South in any and all lines will begin to be taken up in earnest?

The situation warrants the unqualified assertion that in the next two decades the growth of wealth per capita will be greater in the Southern States than elsewhere in the world, and that it will be far ahead of any previous record of history. The best is still ahead!

The Pennsylvania Railroad's Entrance into the South.

The organization of the Carnegie Steel Co., with a capitalization of \$160,000,000, to which it is reported will be added \$160,000,000 of bonds, the total probably representing not more than the actual cash value of all the properties and good-will of this business, naturally attracts attention to the wonderful story of progress made by the coal, iron and steel interests of Pennsylvania. Based largely on these interests as the foundation of its manufacturing development, Pennsylvania had in 1890 \$997,000,000 of capital invested in manufacturing, or \$240,000,000 more than the fourteen Southern States, where the aggregate capital in manufacturing was \$657,000,000. The capital invested in mining interests in Pennsylvania, compared with that in the South, was proportionately as large. Although no statistics of capital invested since 1890 will be obtainable until the new census is completed, the coal, iron and steel interests of that State have made wonderful progress. This is illustrated in the production of coal. The output in Pennsylvania in 1899 was 127,000,000 tons, of which 73,500,000 tons were bituminous, as compared with about 40,000,000 tons for the entire South.

To the wise management of the Pennsylvania Railroad for many years much of the industrial development of

Pennsylvania is due. That road, unquestionably the greatest and best-managed railroad of America, has wisely used its best efforts to aid in the progress of manufacturing and mining. Its influence has always been for good, and because of this it is a matter for great congratulation that the far-seeing managers of the Pennsylvania system are now turning their attention to the South, having recently secured control of the Chesapeake & Ohio and the Norfolk & Western railroads. This means that the great financial influences back of the Pennsylvania—influences so intimately identified with the advancement of that State—will now necessarily become interested in the upbuilding of the coal and iron interests of the South. What has been done in Pennsylvania through the co-operation and far-sightedness of the capitalists interested in the Pennsylvania Railroad Co. will now be done throughout the territory tributary to the roads in the South which they have acquired. The coal and iron are there in even greater abundance than in Pennsylvania, and these capitalists, knowing this, know that they can create traffic by creating coal and iron development.

The Manufacturers' Record believes that this move in the purchase of the Chesapeake & Ohio and the Norfolk & Western is for the South one of the epoch-making periods of its industrial life. It will focus upon the South the

attention of many great capitalists who have heretofore not invested in that section. With the South's advantages for iron and steel making and coal mining, greater than those possessed by any other section of this country or any other equal area of the world, we are certain to see duplicated in that section the enormous iron and steel developments of Pennsylvania, and naturally something of the profits, rivaling the vast fortunes that have been made in that State.

Technical Training as an Aid to Commerce.

One of the most persistent workers in recent years for technical training in this country has been Mr. J. C. Monaghan, United States consul at Chemnitz, Germany. He has been a close student of industrial and commercial interests of the empire, and has been impressed by the wonderful development in the union of the two. On visits to this country he has lost no chance to preach such a union on this side of the water, and has undoubtedly contributed much to the cultivation of the public opinion in favor of it. On another page of this week's Manufacturers' Record is a suggestive article from Mr. Monaghan, setting forth clearly the kind of industrial training which he believes is demanded by the future of the United States. He pleads, not so much for a high-grade technical school fitting men to be directors of industry, either in practical or theoretical channels, but for the institutions that will train the hand and eye of the great mass of workers to back most effectively the developments of the age of machinery. In a personal letter to the Manufacturers' Record he writes:

I welcome every opportunity and occasion to say a word in a paper like yours to stir our manufacturers and merchants to a just appreciation of their marvelous resources. The world wonders what we are going to do. The East is to be opened up. We worked well in the fifties to aid Japan. What are we to do for China? Where are we to be in the building up of Russia, the East and all the parts just coming into progress?

Even the superficial student of current events cannot fail to be impressed with the fact that the possibilities of development of American commerce depend for their fullest realization largely upon the ability of this country to meet in distant lands the competition of older industrial nations. As a supplier of raw material to the manufacturing nations the United States have played well their part during a century, even at their own expense. Americans have discovered that a nation's wealth is increased by supporting home industries and substituting for exports of raw material the manufactured goods. That is why, for instance, the South is building cotton mills and steel plants.

Naturally, the older nations are beginning to feel the effects of the entrance of the younger into the field once monopolized by them, and Germany, for one, has for many years been equipping itself through its industrial schools to gain and hold advantage as an exporter of manufactured products. The United States cannot afford to permit Germany to outclass us in this particular. Abundance of natural resources, energy in seeking markets and improved machinery will not alone suffice to enable this country to maintain its prestige as a manufacturing exporter gained in recent years. It must prepare the rising generation to handle the machinery,

and must prepare it upon the lines suggested by Mr. Monaghan. Especially does it behoove the South to study this question. In many things the South has led the country. Here is its great opportunity to lead in the advancement of this much-needed technical training, and to the people of this section we commend Mr. Monaghan's statement of what Germany is doing.

The Importance of Reciprocity Treaties with Europe.

Bearing directly upon the recent discussion on both sides of the Atlantic of the commercial relations of the United States and Germany is an article in the current number of the North American Review by Hon. Robert P. Porter. He traced rapidly the enlargement of the American export trade to nearly one billion and a quarter dollars and points out that with the addition of manufactured products to the exports of raw material has come the necessity for more serious attention being given to the subject than ever before. He estimates that when commercial relations with Great Britain, France and Germany are satisfactory, four-fifths of our European trade is covered, and his paper is an argument for the maintenance of such relations by treaties. He does not anticipate any difficulties with England on this score, but sees in Russian energy a demand for greater activities on the part of the United States to retain the markets for our exports of agricultural products and raw material. Russia's treaty with Germany, her friendly relations with France and her overtures to England are all in line of a policy, he says, which has for its basic principle the broadening of the European markets for Russian foodstuffs, petroleum oils, mineral products, wool, timber, furs, hides and skins.

With America an exporter of manufactured goods the attraction of this country will, he contends, naturally become less for the European manufacturer, who will be more willing to back up his own government in forming commercial alliances with Russia, which is doing so much to bring the possibilities of the Far East in close touch with Europe. The making of a commercial treaty with France will preserve our trade with that country on a satisfactory basis as long as that treaty lasts, but Mr. Porter believes that our commercial relations with Germany are of even greater importance than those with France. While our exports to Germany have increased in ten years from \$68,000,000 to \$155,000,000, our imports from that country have remained stationary. German authorities have begun to claim that the trade was a little too much one-sided, and it is such claims as that which tend to hamper friendly relations. Mr. Porter meets the claim as follows:

Cut off from Germany the supply of American cotton, of mineral oils, of fertilizers, of tobacco, of copper, of lumber, of builders' material, of turpentine, of heavy machinery, and German industries would suffer. Reduce the supply of cheap breadstuffs, lard, bacon and meats, and the people must eat more horseflesh and black bread, paying just as much for the inferior nourishment. Three-quarters of this so-called "balance against Germany" is a balance in favor of German industries, and simply indicates that Germany is fulfilling her mission as a great industrial nation. It represents the basis of her wealth, and is in no sense a sign of decadence. A considerable portion of this "adverse balance" is altogether fictitious, and merely indicates the great prosperity of the German shipping interests of Hamburg, Bremen and other minor ports. Quantities of these goods find their way via

German ports and German railways to Russia, Belgium, Austria-Hungary and other European countries—a source of wealth to the German empire rather than of discouragement.

He urges a prompt negotiation of a treaty with Germany to stop the commercial friction now and then breaking out, and he believes that by a little energy much of our foreign trade for years to come will be assured. Mr. Porter's article is significant, not only because of the practical suggestions in it, but also as an indication of the position which the United States has gained as a world-power in commerce. When he dwells upon the part played by exports of American raw material as contributors to the commerce of other nations he comes close to the South, which for many years has probably dominated in such exports. His article points to a possibility of a decline in the quantity of such exports. The hint comes at a time when this country is equipping itself for more profitable export business, and the use of native raw material in larger quantities in manufactured articles for trade abroad. The question naturally arises, why should not this country meet and compete successfully with European support of Russia in opening the possibilities of the Far East as a market for manufactured goods?

The argument is being again advanced at the North that the adoption of improved machinery in New England mills will overcome the advantage of the South as a textile manufacturer. If we are not mistaken, the South has given New England several valuable suggestions as to improved machinery. It is not at all unlikely that the South will be able to equip itself with improvements just as rapidly as New England. As a matter of fact, the best way to overcome Southern advantages in this respect is to build mills and machinery factories in the South, and thus reap the advantages afforded by the South.

More Ore Discovered.

[Special Cor. Manufacturers' Record.]
Anniston, Ala., April 7.

I. M. Sproule discovered an immense bed of rich needle iron ore this week on lands just north of this city recently purchased by him and Dr. Jones of Chicago. Dr. Jones is moving to this city, and he and Mr. Sproule will put a large force to mining the ore.

Messrs. G. B. Randolph and D. A. Farrell of this city are opening a big brown iron-ore bank near Piedmont, in the northern part of the county, and mining and shipping in large quantities.

D. F. Constantine, who has had an extensive equipment of modern machinery put in position, will begin operating his gold mine at Idaho, Clay county, the coming week.

The mining of the famous brown hematite iron ore of the Anniston district continues with unabated vigor. It is in great demand by all of the furnaces in this section, and new mines, large and small, are being opened constantly.

Of the more than 2,000,000 tons of coal shipped from Lambert's Point, Va., in 1899, 1,962,782 tons were Pocahontas coal, 90,971 tons gas coal and 12,858 tons cannel coal. The shipments required 639 steamers, 643 ocean barges and tugs and 533 schooners.

The output in the Joplin (Mo.) district during the week ending April 7 was 12,571,780 pounds of zinc ore and 1,071,800 pounds of lead ore, valued in all at \$201,758.

VALUE OF INDUSTRIAL SCHOOLS.

By J. C. Monaghan, United States Consul at Chemnitz.

You want a word or two about technical industrial and industrial art education. I wish it were in my power or yours to put forth the one word wanted to make known to this nation the great need now of just such schools as have helped to make Germany agriculturally, commercially and industrially successful. The assertion, so often made, that we have won our way to wonderful success without these schools is nonsense. We won our way to success not because we were without them, but because we built on a basis of wealth unknown in any nation in any era of history. No country ever had so much cotton, corn, coal, iron, copper, gold, silver, petroleum, raw materials, etc., as these United States. The question to ask is not what Germany is or is not with them, but what the empire would be today, or rather would not be, had it not had them? Add then this question, not what we are without such schools, but what we undoubtedly would be today had we had them. As helpers to natural talents they are without rivals. This the Germans recognize. So, too, do the French, Belgians and English. These people have sent commission after commission to study the forces that have helped Germany to a place in the van of progressive industrial and commercial States. The answer in each case by each commission was, the empire's technical industrial and industrial art schools.

These Schools Widespread.

So successful a system was sure to commend itself to all parts of the empire. Their fame has gone out into the ends of Europe, if not of earth. All countries are making efforts to engraft or incorporate similar ones into their regular systems. No part of the empire is without them. Berlin has from twenty to twenty-five. Among these are schools for builders, bricklayers, blacksmiths, braiders, bookbinders, barbers, cabinetmakers, chimney sweepers, glaziers, gardeners, painters, paperhangers, shoemakers, saddlers, tailors, wheelwrights, weavers, etc. They are attended by nearly 10,000 pupils, employ 350 teachers and do a good work, possible only by a system that aims at perfection. Several of these schools are open day and night. The equipment is excellent. The method of teaching is practical as possible. For example, boys who are to be blacksmiths stand around a large table on which are plaster-cast models of horses' hoofs. Near these are actual hoofs from actual horses. The teacher takes the plaster-cast hoofs apart, passes the parts around among the pupils, explains where veins, quick, etc., will be found in normal and abnormal forms, showing how real normal and real abnormal forms conform to the plaster-cast ones or vice versa. After the theoretical hour or hours, under excellent professors, the boys go to real blacksmith shops in which real horses are being shod and assist in the work. Once the course is completed and the necessary knowledge and skill are acquired, the boy begins life for himself, but before he lays hand on a horse's hoof he must have his certificate of ability. This is as it should be. How many horses are made lame here by unskillful blacksmiths?

Usual Courses.

Most of the courses include reading, writing, arithmetic, bookkeeping, physics, mechanics, drawing and modeling. These differ in the different departments of the schools. All are eminently successful. The courses in textiles is as thorough as they are in any of the other

lines. Woolen workers learn not only the geography of wools, but they learn how to sort wool as it should be sorted to get the very best results. The course for cotton-spinners and weavers begins at the cotton bulb on the plantation in India, the Carolinas, Texas, Tennessee, Tunis or Egypt, and ends in the finished product on the counters of New York's, Boston's, Baltimore's or Chicago's big stores.

Technical and Industrial Art.

I am not advocating technical education as commonly understood, nor art education in the broadest sense. These are being well cared for. What we want now more than anything else is a system of education having for its object the training of the millions who must make their living in mills and shops. We have some of the very best technical schools on earth. They are too high-toned, if I may be permitted to put it that way, for the masses of men and women. Boston's Back Bay may go to the Tech; the thousands in Lowell, Lawrence, New Bedford, Fall River, Taunton, Springfield, etc., cannot. What is true of Massachusetts is true of Maryland, except that Maryland has no school of technology equal to the Massachusetts one.

Money-getting should not be man's measure of his life. There are higher, holier and better things. The man who knows the laws that are in the things he works with will get more out of his life than money can purchase. The mason who is familiar with his marble, granite or sandstone, who knows whence it came, to what period of the earth's history it belongs, its very life, its odd ways, etc., will work out infinitely higher results on the senseless stone and on himself than will the worker who knows only that for his ten hours' labor he is to get ten shillings, or \$2.50. The worker in wood who knows all about endogenous and exogenous trees, who knows all the laws preliminary to trees and woods, will work with a will and intelligence impossible to him whose interest mounts no higher than his weekly wage. The farmer or farmer's son who is familiar with the laws underlying the grasses in the meadows, the lilies in the fields, the gnarled old oak and the lofty pine, the stately elm and the sweet maple, will work with a will and pleasure foreign to the ignorant boor. Such a toiler, as he bends above the earth, whose laws he can read, or raises his eyes to the heavens, the courses of whose secrets are to him as an open book, will give his God a worship high, infinitely higher than that of the clodhopper who bends his soul as he does his body beneath a burden of fear. O, how much there is to learn! How much there is to do! Now is the day and now is the hour! No country that I know anything about needs these schools so much as our country. A new era is opening—an era of trade relations with the world. It we are to win our way and hold it in the East, Russia, South America, South Africa, Australia, Polynesia, we must have these schools. Nor can we introduce them too soon.

Memphis Business Men.

The business men of Memphis are making a special effort to attract industries to that city. To the efforts of the Industrial League, a strong organization, with T. J. Latham, president; James S. Davant, vice-president; F. B. Hunter, treasurer, and E. B. Miller, secretary and industrial agent, as one of the means to

this end has been added the Business Men's Club, of which Mr. H. M. Towner is secretary. This club has fitted up handsome quarters, where it will entertain visitors from other cities and country merchants, and enable strangers to feel at home.

THE NEW BANKING LAW.

Additional Opinions of Southern Financiers on Its Effect.

In addition to the opinions recently published on the effect of the recent legislation relative to national banks, the Manufacturers' Record has also received the following from financiers in the South:

Hon. Herman Myers, president National Bank of Savannah, Ga.: "The new currency bill, which has just become a law, and which allows the organization in small communities of national banks with a minimum capital of \$25,000, will have a less noticeable effect in Georgia than probably any other State. The field for such institutions is already covered by State banks. There are now nearly or quite sixty banks in the State, the capital of each of which does not exceed \$30,000. These banks have unquestionably done good, and they have, with but few exceptions, made money for their shareholders. It is difficult to say how many of the State banks will become national banks in this State. The State charters are much more liberal as to legal reserve and as to limits on loans to individual borrowers than the national bank laws. They also permit loans on real estate, and for this reason are regarded with especial favor in the country sections. The profit from circulation would hardly offset these advantages, but the question of taxation may be a controlling factor. Our Supreme Court has held that under the provisions of our State constitution, which requires that taxation shall be ad valorem and uniform on the same class of subjects, the taxes on banks must be the same as those levied on other personal property or real estate. Recently it has been decided in the case of a building and loan association that the assets of the association may be taxed as well as the shares in the hands of the shareholders. If this ruling should also be applied to State banks it would either drive them out of business or compel them to organize under national charters. The national bank act prohibits the State from imposing any tax on national banks except a tax on shares. I know of no State bank in Georgia which has taken any steps toward changing to a national bank since the enactment of the new law. Unless bonds are so dear as to greatly reduce the profit on circulation, many of the State banks in the cities and larger towns will no doubt take national charters, and it may be that some of the smaller banks will also change their organizations."

Jacob Phinizy, president Georgia Railroad Bank, Augusta, Ga.: "I am satisfied that the recent legislation in regard to national banks organizing with a capital of \$25,000 will be beneficial to our section. I think it will affect favorably all interests. I do not think it will have a tendency to create more banks than the business offers. I do not know of any banks positively that think of converting to national banks, but there has been a great deal of discussion upon the subject owing to some State taxation on State banks; if this taxation, however, is not put into effect, I do not think there will be many changes."

E. E. Holland, president of the Farmers' Bank of Nansemond, Suffolk, Va.: "I have no well-matured views on the effect of the recent legislation which allows national banks to be formed with a cap-

ital of \$25,000. I cannot think, however, that it will especially effect the agricultural, commercial and manufacturing interests of this section. I know of no banks which are now being organized or changed to national banks as a result of the new law."

John W. Fries, Winston-Salem, N. C.: "In my opinion, the recent financial legislation of Congress, which allows the formation of national banks with a capital of \$25,000, would be a very material help to many sections of the South and West which now have deficient banking accommodations. This is especially true, since these banks will have the privilege of issuing currency to the par value of their stock upon the deposit of new United States 2 per cent. bonds in sections of the country where they will likely have little difficulty in keeping their notes in circulation. Even under the present law there is such a moderate profit on circulation that it is not and will not be attractive to the larger banks in the money centers. But the advantages to be derived by small communities and rural sections will not be realized fully until those who have labored so long and earnestly for the cause of monetary and banking reforms shall have been able to score another advance and secure such elasticity for the currency as they have hoped and labored for all along. That this further step will be secured I entertain little doubt, but such reforms come slowly, and it is needful that we should continue to labor patiently and hopefully."

W. A. Post, president First National Bank of Newport News, Newport News, Va.: "Do not think legislation referred to will materially affect this section. It ought to benefit rural districts, and I believe it will. I do not think it likely to create more banks than necessary for a healthy condition of business. There are other features of the bill that will produce beneficial results, especially that relating to the circulation allowed to be issued by national banks."

Charles Scott, president Bank of Rosedale, Rosedale, Miss.: "The recent legislation relative to national banks, I think, will be rather beneficial to the agricultural, commercial and manufacturing interests in this section of the country. I do not believe, however, that it will tend to create more banks than can transact business. I know of no institutions which are being changed into national banks to take advantage of the law."

John H. Noble, president Anniston Loan & Trust Co., Anniston, Ala.: "I am heartily in favor of the new law except as to reduction of capital. I think as much protection should be given as possible to depositors."

Important Development Scheme.

[Special Cor. Manufacturers' Record.]
Anniston, Ala., April 7.

Capt. James Crook, president of the Alabama railroad commission, and S. D. G. Brothers of this city, have bought an option on the property of the Jacksonville Land Co. at Jacksonville, twelve miles north of this city, comprising 8000 acres of valuable mineral and other lands in the town of Jacksonville and in this and adjoining counties. It is understood that they are acting for Eugene Kelly, principal owner of the East & West Railroad, and that the deal contemplates the extension of the East & West from Jacksonville to Anniston, the building of a cotton mill at Jacksonville and other important industrial developments. Geo. P. Ide of Jacksonville is now in the East closing up the cotton-mill part of the reported programme, and it is said that the mill is practically assured.

IMPROVEMENTS AT NEW ORLEANS

Plan to Provide \$15,000,000 for Sewerage, Drainage and Water-Works.

On the 17th inst. the city of New Orleans will vote on the question of amending the State constitution, allowing a special tax to be levied for the purpose of sewerage, drainage and water-works systems. It is expected that the election will result in favor of the improvements by a very large majority, as public sentiment is strongly for them.

The financial plan formulated is to levy the tax of two mills on a dollar upon the assessable property of the city for a period of forty-three years. This will form a fund for the payment of interest, but in addition the city is authorized to appropriate half of the surplus of what is known as the 1 per cent. debt tax. Upon the amount accruing from these sources of revenue as interest bonds will be floated dating from July 1, 1900, which will be called "Public Improvement Bonds of the City of New Orleans." It is calculated that the bonds can be floated upon an interest basis of about 3½ per cent., which would give a total amount of nearly \$15,000,000, as the revenue accruing from the debt tax and the special tax already referred to will aggregate about \$500,000 annually. The bonds will be a lien upon all of the assessable property of the city, real and personal, which is valued at \$141,000,000. At present the total indebtedness of the city amounts to \$14,294,000. Considering the security which is offered and the guarantee of interest from the sources indicated, it is believed that the issue of bonds will prove attractive to investors when investigated.

The city of New Orleans, by reason of its location, presents some very difficult problems in the construction of a sewerage and drainage system. It comprises about 25,000 acres in area, and is nearly surrounded by levees. There is but few feet grade anywhere within the city limits, and an elaborate pumping system is required to remove the storm and other water. As readers of the Manufacturers' Record are aware, work has already begun upon the drainage system, as a fund was especially provided for the purpose, and what has been accomplished demonstrates the fact that these improvements can be carried out. The plans include a series of canals varying from laterals 500 feet in length, five feet in width and three in depth to ditches 13,000 feet long, sixty-five feet wide and twelve feet deep. Each of the smaller canals is, in turn, connected with a series of drains connecting with the dwellings and other buildings in the city. Along the main canal are located seven pumping stations ranging in cost from \$135,000 to \$350,000 each. By their means a current is created which forces the water to the point desired, the main terminus of the system being at Lake Borgne, where sewage and drainage can be deposited without danger to the city's health. The system is divided into six sections, each of which is entirely independent from the other and served by its own network of canals, so that in case of accident to any section the others can be relieved without the necessity of waiting until the damage has been repaired. Thus far \$2,156,450 has been expended on the work.

Public opinion has been strongly in favor of the improvements contemplated, and it is noticeable that little or no objection has been made to the work by the citizens, in spite of the large outlay which it involves. The improvements are on charge of a sewage and water board, of which Hon. W. C. Flower, mayor of the city, is president, and which includes R.

M. Walsley, president of the Louisiana National Bank; A. C. Hutchinson, vice-president Southern Pacific Railway Co.; J. C. Morris, president of the Canal Bank, and other leading citizens. Mr. F. S. Shields is secretary.

ZINC IN TENNESSEE.

Rich Deposits and Possibilities of Their Development.

Scattered here and there throughout the valleys of the Tennessee and Holston rivers from Chattanooga eastward into Virginia, zinc and lead are found cropping in quantities that certainly justify the attention of capital, while exceptional opportunities are open to intelligent prospectors.

This is not a new field so far as the existence of the ore is concerned, but from point of development it is. Still enough work has been done to demonstrate the fact that some of the ores are the purest in the world, and that they lie in almost inexhaustible deposits throughout the dolomites and limestones which traverse the territory named, dipping at various angles between the horizontal formations of the coal-bearing territory northward and the granites of the Smokies, Unakas and Blue Ridge mountains southward, and embracing a width of from fifty to seventy-five miles, through which from one side of the valley to the other zinc is found cropping in various forms from carbonates to rosin jack, but in the main sulphides and blende.

Like the majority of the mining industries or possibilities of this section, the zinc has been to a large extent neglected, as it has been and is still difficult to convince capital that in a section so long populated as is this it should be so far behind in development of its mineral resources. But to him who hesitates I point to the giant infant iron industry of Alabama, Tennessee and Virginia; the phosphates of Florida and Tennessee, and the gold fields of Alabama, Georgia, the Carolinas and Virginia; at the development of which is fast teaching the world that Alabama makes the price of iron; at Tennessee phosphates leading the world, and at the developments in Georgia, and more especially around Dahlonega, which are particularly significant of the wealth and possibilities of the South. For centering around the site of the old government mints wonderful developments in gold are in progress which within the near future will teach the world that, owing to favorable conditions and extent of deposits, the Piedmont section of the South is the safest and most attractive gold field of the world.

But to the zinc. For some fifteen years past the Eads, Mixer & Heald Co. operated a smelter at Clinton, on the Clinch, the majority of the ore used having been floated down that stream on barges to the works. In the neighborhood of Mossy Creek operations were also carried on, while spasmodic efforts at prospecting have been made in a small way, which all point to permanent and profitable deposits of the purest zinc in the world. The smelter, for reasons unknown, blew out, and very little interest in zinc has been taken until quite recently, when the properties of the former-named company were taken over by the Weir Zinc Co., under the management of Col. Lowell Jerome, and shipments of ore are being made to distant smelters. It is understood that this latter company used a diamond drill in prospecting, and reports are that the results were very satisfactory; at any rate, the sale was confirmed and shipments begun.

Shipments are also being made by parties at Newmarket, Tenn., while under

the shadows of the church towers of Knoxville bodies of ore are uncovered showing a width of 100 to 300 feet and carrying an average of about 20 per cent. sulphides, which to a concentrator holds out a welcome hand.

The formation dips have been thrown from their original horizontal position. Upon the edges of the broken folds the ore is found cropping, thus avoiding all possibility of risk in prospecting through barren measures, and profit follows the first shot.

The valleys present every opportunity for easy mining, as an abundance of water is found in innumerable creeks, usually crosscutting the formation between hills of varying heights, which latter afford excellent positions for tunneling and open-cut work, although what little work has been done shows increased values in ore as depth is attained.

With the exception of the reported work with the drill, the rest has been practically surface work. In some instances carbonates averaging over 40 per cent. run of mine are found capping the sulphides, thus allowing shipments of material from the very first breaking of the ground and presenting to the man of small means an opportunity of developing an industry. In the nature of things, prices of land throughout the section vary, and where development has been made fair prices are asked. Upon the other hand, owing to little prospecting having been done, good zinc lands may be bought at farming land or poor ridge land prices, ranging from \$5 to \$100 per acre, while those lands known to carry zinc sell for one-tenth of what they are intrinsically worth. This country needs prospectors, backed by would-be investors, and if the missionary is intelligent and faithful there is little doubt that no loss will follow.

A country undeveloped, where lands are cheap and pay ore crops in hundreds of places, it strikes me is an inviting field. In close proximity to the zincs, lead ores lie in more or less interesting amounts. HENRY V. MAXWELL.

Activity at Paducah.

[Special Cor. Manufacturers' Record.]

Paducah, Ky., April 9.

Paducah has never been the scene of greater activity than at present, and the prospects are most flattering. Manufacturers are looking this way, attracted by our great natural advantages.

Since the first of January this year Paducah has secured the following new industries: The Kentucky Furnace Co., furnace capacity of 100 tons of pig-iron daily; the Paducah Brewery Co., whose annual capacity will be 25,000 barrels, and the construction of which will begin this month; the Forked Deer Pants Co., with a capital of \$25,000; the Clark-Danforth Axe Handle Co., which will employ seventy-five operatives, and the Paducah Candy Manufacturing Co.

In addition several other most desirable manufacturing concerns are considering the advantages of this city, and the prospects are that the record of new factories for the remainder of this year will be as satisfactory as the excellent record thus far made.

The putting in blast of the Paducah iron furnace will be an event of the greatest importance to Paducah and to all of Western Kentucky. It is confidently believed, in view of recent developments in coke-making, that in the near future it will be demonstrated that iron can be made almost, if not quite as cheaply in Paducah as in Birmingham. In any event, the Paducah district should be second only to the Birmingham district as an economical and profitable ironmak-

ing center. It will well pay ironmakers to keep their eyes on Paducah.

Among the large buildings that will be erected this spring and summer are the brewery, the Palmer House addition, which will cost \$70,000, and the Masonic and Odd Fellows' building, the cost of which will be \$40,000.

A striking proof of the remarkable expansion of business in this city is found in the fact that the postoffice receipts for the year ending March 31, 1900, were \$36,000, while for the year ending March 31, 1898, they were but \$24,000, an increase of 50 per cent. in but two years.

THE IRON MARKET.

Reduced Stocks and Heavy Consumption.

[Special to Manufacturers' Record.]

New York, N. Y., April 12.

In its weekly review of the iron and metal trades the Iron Age says:

"Considerable interest attaches to the figures we publish this week showing the condition of the blast furnaces on the 1st inst. It had been expected that manufacturers' reports would show not only an increase in production, but a decidedly heavy increase in stocks at the furnaces. The complete statistics, however, show that the weekly capacity of the furnaces in operation on April 1 was 3161 tons less than on March 1. This was largely due to the irregularity of furnace operations during March, owing to the scarcity of coke, and in some sections to difficulty in securing a sufficient supply of iron ore.

"The condition of stocks is also somewhat surprising, as the increase in all kinds of pig-iron on hand was only 12,380 tons. These figures go far toward explaining the comparative steadiness of prices of pig-iron during the month, with consumers so generally remaining out of the market. The consumption of pig-iron is proceeding on a heavy scale, and the slight increase in stocks at furnaces was accompanied necessarily by a large reduction in the stocks in foundrymen's yards. It is believed, taking furnace stocks and foundrymen's stocks together, that the supply of pig-iron in this country at the present time is as low as at any previous period, if indeed it is not considerably lower. The situation is therefore calculated to make large buyers apprehensive, as all consumers are conducting a strictly hand-to-mouth business, which is liable to have its dangerous side.

"The position of pig-iron abroad constantly grows stronger, advices from Great Britain representing a continuous reduction of stocks, withdrawals from public stores running up to 1500 tons daily. In some districts of England famine conditions prevail with respect to pig-iron. Several sales for export have been made here during the week, and if freight room could be procured transactions would be much larger. It is stated that No. 3 Southern foundry has been sold at \$16.50 at furnace for export, which is the full market price.

"The situation in steel and finished materials is not so assuring as in pig-iron. Billets have been reduced \$1 per ton at Pittsburg, and weakness prevails in finished products generally, except in rails, structural shapes and sheets. Some effort is being made to stiffen the market by the shutting down of steel works and rolling mills. Manufacturers are confident that a better demand will develop when buyers find that strong and concerted efforts are being made to prevent a serious decline.

"The foreign demand for finished products is excellent. Sales are being made of light rails and other forms of steel in good quantities, but an especially large

export business is being done in wire nails and wire."

Eastern Iron Markets.

[Special Cor. Manufacturers' Record.]
Philadelphia, Pa., April 10.

The situation of iron and steel is a little more complicated. Reports are somewhat at variance from manufacturers and brokers. Some are doing a good business and report prices high and firm, while others are doing but little and take an uncertain view of the situation. A moderate amount of foundry iron is selling every day, the better grades being preferred and the fuller prices being more easily realized than low prices on low grades. Foundry iron is in active demand in the city and throughout the country. Forge iron is \$18.50 to \$19.25, and half a dozen mill-owners are now in the market for moderate supplies, the idea being to have stocks on hand in case of emergencies. While there are rumors of a downward tendency in prices and some reasons for it, the belief in this general tendency is not strong enough to induce manufacturers to let stocks run very low. On the other hand, every user of pig-iron is aiming to have a pretty good stock of iron on hand.

The same is true of finished material. While there are rumors of a declining tendency, manufacturers say that all their customers are very particular to renew their orders in time and to have iron delivered as promptly as possible. Merchant bars are 2 to 2.10; flange, plate and shell are without change; structural material is still 2.40 to 2.80, and the demand is very active. All our big works are sold ahead, and their representatives say there is no doubt but what they will keep ahead right along. Steel rails are \$35, and there is a good demand from inquiries that arrived from abroad on Saturday and today.

There is a greater abundance of scrap for some reason; in fact, a great deal of old machinery has been torn out for the substitution of new. Scrap is a little easier, and will probably rule slightly lower. No. 1 yard scrap is \$19; old rails are down to \$24 for iron and \$23 for steel. The general impression is that the demand for all kinds of iron and steel material will be strong enough to give prices an upward turn during this month. Everything looks that way.

A dispatch from Birmingham, Ala., says the annual report of the Sloss Iron & Steel Co., which is now owned by the Sloss-Sheffield Iron & Steel Co., shows earnings for the year 1899 of \$802,667, which, after deducting \$263,753 for interest, taxes, depreciation and renewal fund, leaves \$538,914 net profits. Out of this a quarterly dividend of 1 1/4 per cent. on the preferred stock was declared in March. Practically all of this dividend goes to the Sloss-Sheffield Company, as the latter now owns all but thirty shares of the 50,000 shares of the capital stock of the Sloss Iron & Steel Co. The Sloss Iron & Steel Co. writes off for depreciation about twenty-five cents per ton on its iron output and about three cents per ton on its coal. The profits of 1899 were made on an average selling price of iron at \$11.10 per ton at Birmingham, whereas the average price now is about \$17. The profit on coal now is about 50 per cent. greater than it was last year.

Literary Notes.

In attractive pamphlet form have been published sketches and views of Richmond College of Richmond, Va. The sketches include "The Growth of Richmond College," by Dr. William E. Hatcher; "The Place of Richmond College in Southern Education," by Hon. J.

L. M. Curry; "The Value of Richmond College to the City of Richmond," by Judge George L. Christian; "The Financial Statement," by D. C. H. Ryland, and a historical sketch. The college has just completed a \$25,000 scientific laboratory building and a \$20,000 dormitory. President F. W. Boatwright is anxious to push the work for endowments of \$50,000 for technical science, \$25,000 for history and political science, \$25,000 for biology, \$25,000 for law and \$25,000 for instructors.

The Ore Deposits of the United States and Canada. By James Furman Kemp, professor of geology in the School of Mines, Columbia University. Publisher, the Scientific Publishing Co., 253 Broadway, New York. Price \$5.

This is the third edition of a volume which, because of its thoroughness and reliability concerning the origin and modes of occurrence of useful minerals in the earth's crust, has become requisite to the teacher and student in economic geology, and to all persons practically engaged in prospecting or mining. It has been entirely rewritten and enlarged so as to make it entirely up to date and to include Canada, the volume being increased in size by about 100 pages. It supplies a condensed account of the metalliferous resources of the country in readable form, serviceable as a text-book or as a reference-book, its value being greatly enhanced by bibliographies guiding, where desired, to original sources. At the same time the author has endeavored to treat his subject in such a way that an extended view of the field is given, making clear what the best workers have already done in recent years toward explaining the puzzling but important questions of origin and formation, so that investigation and study may be stimulated. The book falls naturally into two parts, the first dealing with general geological facts and principles, the formation of cavities in rocks, the minerals important as ores, the filling of mineral veins, certain structural features of mineral veins and the classification of ore deposits. The second part treats of the ore deposits and discusses the iron series, lead, copper, zinc, silver, gold and the lesser metals, while in an appendix is presented a review of the schemes for the classification of ore deposits. The volume is profusely illustrated with half-tone engravings of mines and mineral localities, with maps and with drawings.

The Engineering Magazine presents as its April leader a most interesting illustrated account of the Cape-to-Cairo Railway, by Mr. John Hartley Knight. Mr. Knight gives a synopsis of the growth of the conception and the progress of the work so far completed, with a sketch of the projected line, the country through which it is to run and the prospects based upon the returns of the railway working to Bulawayo. He gives a brief outline, also, of Mr. Rhodes' twin scheme, the African Transcontinental Telegraph.

Shipments of lumber from the port of Mobile, Ala., for the week ending April 6 aggregated 5,079,295 feet, and for the season 92,087,977 feet, against 41,571,875 feet last season. Shipments of sawn timber for the week were unusually large, amounting to 685,072 cubic feet, and for the season 2,202,192 cubic feet. Shipments of hewn timber for the week were 36,778 cubic feet, and for the season 172,309 cubic feet.

The Maryland geological survey has begun an exhaustive study of the clay deposits of the State under the direction of Prof. Heinrich Ries of New York.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

COTTON ABROAD.

United States Consuls on the Outlook of Trade.

Mr. George W. Bell, United States consul at Sydney, New South Wales, believes that it is time for Americans to look to Australia as a market for cotton goods. He estimates that the importations by Australians equal about the total exportation of the United States in cotton manufactures. In Australia cottons are worn all the year round by a majority of the people, and lawns, muslins and such like fibers, being extensively used, the Australian market demands a study of taste and fashion. Mr. Bell suggests that in advancing the trade the agent must display his goods, show their merits, furnish what the customer wants, meet the prices of all competitors and then convince the trade that he is ready to fulfill the requirements of every emergency. It is no short or easy task, he contends, to build up a foreign trade, but it is easy to lose it. He finds that success of other American goods in Australia is largely due to the readiness of manufacturers to make goods suitable to the trade, as judged by those on the ground, and he believes that if cotton-goods dealers will pursue the same course they may soon have a splendid traffic.

Mr. Samuel S. Lyon, United States consul at Hiogo, Japan, has interviewed a member of the Mitsui Bussan Kaisha, the largest importers of raw cotton into Japan, in a study of the outlook for American cotton in that country. He learned that of the 800,000 bales of cotton used every year in Japan, from 20 to 30 per cent. is American cotton, though there is a tendency to increase the American percentage. The consul points out that about 13,000 bales a month could be imported from the Pacific coast were it not that the steamers from San Francisco, San Diego, Tacoma and Seattle give so much space to cargoes for China.

United States Consul Goldschmidt of Lagayra writes that there is not a United States dry-goods shipment, wholesale or retail, in Venezuela, the business being generally controlled by Germans, French or Venezuelans. He thinks that now is a good time to increase the sales of United States goods in Venezuela, as Europeans, giving less extended credits than formerly, are yielding one of their advantages over Americans.

Contest for Russian Trade.

Frank H. Mason, United States consul-general at Berlin, writes that Germany will attempt to anticipate for itself the benefits expected to flow from an exhibition at Moscow of American agricultural machinery. It is the intention of American exhibitors of that class of manufactures to transfer their goods to Moscow after the close of the Paris Exposition. The announcement of this plan has induced the Central Union of German Industrials to issue a circular to all German manufacturers urging them to hold an exhibition of their wares in Russia about July 1, four or five months in advance of the proposed American exhibition at Moscow. The circular points out that serious danger is threatened by the American exhibition to Germany's trade in agricultural implements with Russia. It is understood that twenty-four firms and companies, including all the largest and most important manufacturers of agricultural

implements and machinery, have agreed to the plan. In this connection the following from the New York Journal of Commerce is interesting:

"The agricultural-machinery trade in Russia is practically controlled by America. As already stated in these columns, the British steamer Crewe recently sailed from Philadelphia to Novorossisk with the largest shipment of machinery ever forwarded by one concern on a single vessel. The steamer Laura, specially chartered by Alfred H. Post of this city, has just left for Novorossisk and Odessa with 4835 tons of agricultural machinery. Three thousand tons are intended for Odessa and the balance for Novorossisk. The machinery was supplied by the McCormick Harvesting Machine Co. of Chicago, the Milwaukee Harvester Co. of Milwaukee, the J. I. Case Threshing Machine Co. of Racine, Wis., and Aultman & Miller of Akron, Ohio. The cargo also included 300 tons of harvesting machinery and 100 tons of binder twine made by the Massey-Harris Co., Limited, of Toronto, Canada. It is interesting to note that the value of the combined cargoes carried by the Crewe and Laura exceeded the amount of the entire American agricultural-machinery shipments made to ports in the Black sea during the whole of last season, and some 1500 tons of the same class of machinery is now in New York waiting to be dispatched to Southern Russia."

Wool in Syria.

In a letter to the Manufacturers' Record Antoine S. Dommar of Damascus, Syria, writes that he is co-operating with the American consuls in Beirut and Damascus to develop commercial relations between the United States and Syria. He adds:

"Since I came here I have bought a small cotton-weaving and spinning mill, and am doing my best to develop it. I need some catalogues of weaving and spinning machinery for cotton, wool and silk, with lowest prices and terms. I have a notion to run a woolen spinning mill, as we have a large quantity of the raw material. If your machinery is cheaper, or at least as cheap as English, I will buy and introduce it here."

He suggests that if American manufacturers can compete with Europeans there would be a market in Syria for agricultural implements, bicycles, ash, poplar and pine lumber, rubber boots and shoes, lagging, jute, hemp and twine, cotton and wool textiles, silk and woolen yarns, razors and rubber goods. He says that to introduce the articles not only are catalogues needed, but also samples. He suggests that later a direct line of American steamers between American and Syrian ports may be needed. Mr. Dommar is anxious to get into correspondence with some American carpet mill, as the Syrian wools are mostly used for carpets.

To Export Oil Through Sabine Pass.

Arrangements have been completed that ensure the handling of large quantities of natural oil at Sabine Pass, Texas. Messrs. J. S. Cullinan & Co. of Corsicana, Texas, are the projectors of the new enterprise. The firm about controls the output of the oil fields of the Corsicana territory, and will establish at Sabine Pass modern facilities for shipping its products. There will be built a storage tank of 1,400,000 gallons capacity, constructed of sheet steel, set on a concrete foundation, and will be in size 30x90 feet. Attached will be a power-house for pumping from cars oil into the tank and thence into the tank steamers for exportation. The oil will have various destinations in Europe as the demand necessi-

tates, Germany being one of the large consumers. Probably several large tank steamers each month will be required at the start to meet orders.

In Greek Markets.

In a letter to the Manufacturers' Record enclosing a list of more than a hundred articles of use in the Grecian markets, and suggesting co-operation of a certain number of manufacturers in an exhibit of their goods at Athens, a policy followed by the Italians, French and Germans, A. Constantinis of Athens writes that the articles in which he is most interested are metals of every kind in tubes, blocks, bars, etc., steam coal in large quantities, cotton, skins, tin, tin-plates, corn and other grain, and paper of every kind, especially that used for newspapers. He says that American firms can compete in paper with firms of Norway and Sweden.

Steel-Rail Exports.

Shipments of steel rails from Sparrow's Point to Siberia and Japan have aggregated nearly 8000 tons within the last week. One cargo alone comprised 5227 tons, valued at \$109,800.

The steamer Wilhelmina recently cleared from Philadelphia with a cargo of railroad supplies for the Siberian Railroad, valued at \$750,000. They included a quantity of rails with the necessary spikes and other fastenings and thirty-one locomotives; also the material necessary for five bridges.

Ready for Service.

The steamship Pleiades, recently completed by the Maryland Steel Co. at Sparrow's Point, has been placed in readiness for service and will engage in the coal trade. As already stated in the Manufacturers' Record, she will rank among the largest class of tramp steamships, and will be utilized for general carrying purposes by the Boston Towboat Co., her owner.

New Line to Rotterdam.

A dispatch from Norfolk, Va., is to the effect that a steamship line is to be established between Norfolk and Rotterdam, Holland, at once. Two vessels which have been in the service between Baltimore and Rotterdam will be used on the line, and others added to the fleet as business requires.

The Coal Trade. By Frederick E. Seward, editor of The Coal Trade Journal, Park Row, New York.

This is the twenty-seventh year of the publication of this valuable compendium of information relating to prices, transportation, etc., of coal at home and abroad. The past year has been a remarkable one in the history of the coal industry of the United States, and this volume is a handy condensation of the important facts bearing upon the subject. Following a clear and comprehensive review of the year are presented tables dealing minutely with mining operations and the distribution of the product by individual States, the history of the year in the principal coal markets of the country, figures of the export trade and a large amount of interesting information about the countries abroad touched by American coal.

J. J. Powers of Vicksburg, Miss., it is announced, has secured control of the Vicksburg & Greenville line of steamers. Three boats are now in service on this line. Mr. Powers is president of the company.

The Alabama Commercial and Industrial Association will meet at New Decatur April 19 and 20.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

An Encouraging Policy.

The attitude of the Southern Railway Co. towards the development of Southern seaports is strikingly indicated in a recent letter written by Mr. W. W. Finley, vice-president of the company, to the News and Courier of Charleston. In his letter Mr. Finley writes as follows:

"We appreciate the importance to the port of Charleston of the maintenance, as an active factor, of its present coastwise service in its relation to traffic passing between Eastern cities and points in the interior districts of the South. Practical plans looking to increasing the facilities in this connection are now under way by both the steamship company and its rail connections.

"We regard Charleston as one of the important cities and ports located on our lines. Our constant injunction to those who deal with the technical features of rate-making and freight-routing is to see that Charleston is kept in its proper relative position with respect to all territory from which our various ports are served. Much has already been done in the direction of the necessary rate adjustments. I can well understand that there should be some criticism on the part of those not familiar with the complications and complexities of rate-making of the apparent delay in connection with what remains to be done, but I want to assure you that no time is being lost, and that the city of Charleston is having, and will continue to have, our consistent support in all that tends to its commercial upbuilding. This is a matter in which your community and the Southern Railway Co. have a mutual interest, and in connection with which responsibilities rest on both parties. It will be our purpose to fully meet our responsibilities, and I have no doubt we will have the fullest co-operation on the part of your community."

Industries Along the Central.

According to a dispatch from Savannah, Ga., the number of industries along the Central of Georgia system is rapidly increasing. While cotton mills are in the majority, the tendency is to diversify manufacturing interests, and a large amount of capital is being invested. The Central has pursued the liberal policy of offering industrial promoters every facility possible, and is thus being rewarded.

New Lines in Texas.

In addition to the new mileage recently referred to as being constructed by railway companies in Texas, contracts have been let for over 125 miles by two other companies. It is announced that the Gulf, Beaumont & Northern Company, which succeeds the Gulf, Beaumont & Kansas City, has let a contract to the Old Colony Construction Co. of Boston to build its proposed extension between Rogan and San Augustine, a distance of sixty-five miles. The line will give the Gulf, Beaumont & Northern an additional mileage in Eastern Texas through the pineries. It is on the direct route to Shreveport, where connection would be made with several important systems. John H. Kirby, president of the Gulf, Beaumont & Northern, states that he has secured a controlling interest in the Gulf & Interstate Railroad, which connects with the Gulf, Beaumont & Northern at Beaumont. The Gulf & Interstate would give the latter line a terminus on Galveston harbor.

The International & Great Northern

Railroad Co., it is announced, is making active preparations for its proposed extensions in Texas, which include about sixty miles of new lines. A contract has been let for the construction work to Hugh Burns of Taylor, Texas, the contract to be completed by August 1. Considerable material has also been purchased. This will be an addition to the Gould system in Texas.

Policy of the Southern.

The policy of the Southern Railway Co. as regarded in New York financial circles is indicated by the following statement from the head of a leading banking house in the metropolis:

"The management has made wise outlay and valuable alliances. It has encouraged local development, and is seeing the fruit of its policy. The net earnings per mile of many roads in the South Atlantic States have been in the past low compared with other sections of the country. This has been on account of the lack of varied industries. The last few years have seen great development in iron and coal, a large growth in cotton manufacturing and the springing up of a multitude of small industries employing the natural products of the country.

"All this has worked slowly but surely to the advantage of the Southern Railway. It is a force which will gain strength and carry earnings up to what may be called a normal mileage level. As the Southern Railway was reorganized on the basis of small earnings per mile, the advance to normal earnings will accrue to the company's stock. I expect to see Southern preferred a high-class dividend stock, and the common stock contains more promise than is realized by those who have not familiarized themselves with the situation."

The Outlook in Texas.

Mr. Henry C. Rouse, president of the Missouri, Kansas & Texas system, in a recent interview gives his opinion of the outlook in Texas as follows:

"I have spent the whole of the month of March in Texas, and during that time have traversed the State in all directions, having covered all of our company's lines and visited many points not reached by the Missouri, Kansas & Texas. I have found everywhere evidences of increased prosperity, and it appears to me that the material prospects of Texas are brighter now than at any previous time since my visits to Texas first began some ten years ago. I look for a good year for railroads as well as for the farmer and the merchant, thus compensating for the existing increased cost of operation caused especially by the higher prices for fuel and railway material of all kinds. We are preparing for the expected heavy movement later in the season by buying additional engines and putting our motive power and equipment in the best possible condition to handle the increased tonnage.

"The construction of our line in extension of the railway from Jefferson to the Louisiana line to connect there with the Vicksburg, Shreveport & Pacific line, is progressing satisfactorily; the rails are already laid across the Cypress river, and eight or ten miles into the country beyond. We expect to have the line operating into Shreveport in June."

John M. Egan, President.

The directors of the Central of Georgia Railroad have elected Mr. John M. Egan, president, succeeding the late Hugh M. Comer, while Major J. F. Hanson of Macon, Ga., has been elected chairman of the executive board. Mr. Egan has been vice-president of the Central about three years, coming from the West, where he

was associated with a number of the principal systems at different periods, among them the Canadian Pacific. He has signally demonstrated his ability since his connection with the Central, and has carried out a very liberal policy in fostering industries and in other ways aiding the progress of the South. Since taking the office of vice-president he has conceived several plans which demonstrated his ability as a railroad executive, and which have shown that he is a man of unusually broad ideas.

To Secure More Cotton Mills.

It is announced that the Louisville & Nashville Railroad Co. intends increasing its efforts to secure additional cotton mills along its various lines. Mr. P. S. Jones, one of its representatives, is to take up the question with Northern investors. One plan advised is to induce planters in the vicinity of proposed mills to cultivate a large cotton acreage by guaranteeing to buy the staple in the seed wherever practicable. This would result in reducing the cost of cotton to the manufacturers considerably, and would also be an advantage to the planters. Along the line of the Louisville & Nashville are a number of extensive water-powers which are as yet undeveloped, and their advantages will be called to the attention of Northern investors.

Railroad Notes.

Mr. W. M. Sloan has been appointed agent for the Seaboard Air Line at Columbia, S. C.

Mr. Richard Emery has been elected general manager of the Nashville Electric Railway Co. at Nashville, Tenn., succeeding E. G. Connette.

The Danville Railway & Electric Co. has secured the franchise of the North Danville Railway & Rapid Transit Co. William J. Payne of Richmond is president of the purchasing company.

At the annual meeting of the Houston & Texas Central Railroad the present officers were re-elected. They are as follows: T. H. Hubbard, president; G. A. Quinlan, vice-president; E. W. Cave, secretary.

The Central of Georgia Railway Co. has made a proposition to operate a steamship service between Savannah and Philadelphia. The proposition has been made to the Trades League of that city by President John M. Egan of the company.

The Red River Valley Railroad Co. has purchased property at Alexandria, La., for its proposed terminals in that city. This line is now under construction to Alexandria from its present terminus. About forty acres have been secured, on which it is stated machine shops and a roundhouse will be erected.

A charter has been granted to the Chuckatuck, Newport News & Norfolk Steamboat Co., which intends operating a line of steamers in Tidewater North Carolina and on Hampton Roads. The company is capitalized at \$10,000. Jas. T. Johnson is president, and L. Johnson, general manager, of the company, which will have its offices at Crittenden, Va.

In a letter to the Manufacturers' Record Thomas J. Woodward of New Orleans writes that a plan is under way to establish a steamboat line from West End to Mandeville, in St. Tammany parish. It is proposed to complete a canal from a point on the Mississippi river near New Orleans to Lake Ponchartrain, using what is known as Lake Borgne canal route. It is understood that New York parties are also interested in the enterprise.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

PROSPEROUS COTTON MILLS.

One View of Conditions Essential in Their Location.

Editor Manufacturers' Record:

In response to an inquiry in your issue of March 29 as to the relative advantages of water or steam and coal or wood, the undersigned would suggest that there are other considerations yet more essential to success, viz., location and labor.

The writer was an officer in the earliest and probably most successful of our Southern textile mills, started in the early fifties and destroyed at the close of the war. Since then he has been in touch with some of the great cotton mills of the East as resident agent in this city for cotton supplies, and having been familiar, directly or indirectly, with textile work from Maine to Georgia, he would submit some facts which may contribute to the success of such industries in our Southland.

The typical mill city was and is Lowell, closely followed by Lawrence, Taunton and Fall River. Most of the mills are owned and the output controlled by Boston men, and yet there is not a spindle turning in that city. The fact is worthy of special consideration. Without doubt the location of textile mills at Lowell was originally determined by the water facilities, but when these privileges were all taken up and steam was introduced the mills were still built along the fall line of streams and not taken to Boston; in fact, there is not a seaboard city from Maine to Georgia in which this industry has been successfully developed. On the contrary, the successful locations are still at or near the fall line of our Appalachian streams. What, then, are the reasons?

In 1850 Lowell had more than fifty textile mills, and a gazetteer of that date, commenting on this rapid growth, says: "Very great efforts are made to avoid the usual objections to a manufacturing city arising from immorality. No female of doubtful reputation is engaged by any of the mills, and the result is, the daughters of the worthy farmers of Maine and Massachusetts find profitable work and agreeable society, without a suspicion that the employment is in any degree derogatory to their reputation." Now, contrast this condition with that assigned as the result of a late disastrous attempt to start a cotton mill in the seaport city of Charleston. In a very short time the enterprise had lost four-fifths of its capital, and came to an untimely end. The reason assigned was, as told this writer, that "the country labor became contaminated by city life." To anyone who is conversant with the habits and ideas of the employees of textile mills (most of whom are children and young girls), the force of this reason will be readily understood.

In the locations back from the seaboard, in the village or town which has grown up around factories, where the operatives compose the majority of the population, where they are "the people," and none can look down upon them with contempt; where they are not exposed to the incentives to vice and immorality

which assail them in a seaport with its nomadic element; where the social and scenic conditions are pleasant and attractive, there will be found successful textile industries. The operatives become attached to the locality. They are content. They are industrious, and socially and morally they are far above the same class in a seaport. Anyone who has had the management of mill hands knows that these conditions are the elements of success. It is, then, from these facts, easy to understand why textile works started in Spartanburg, S. C., "flourish as the green bay tree," and the same works started in Charleston seaport should go down to ruin.

Look to the location. Look to the social, moral, hygienic and physiographic conditions, and there will be success. Ignore these, and there must be a failure. This fact is shown all along the line from Maine to Georgia, as anyone may ascertain for himself. Not power or wood or coal, then, but labor and location must determine the success or failure of textile industries.

JOS. A. ROBERTS.

Savannah, Ga.

Roundlap Presses in Alabama.

T. W. Pratt, Huntsville, Ala., district manager of the American Cotton Co., in a letter to the Manufacturers' Record says:

"The round-bale plants of Alabama did very well last year, in spite of the fact that the conditions were very much against them. We put in thirteen plants in the State, and I do not know one of them that does not feel satisfied with the result. The plants put in last year did as follows:

Pike Road.....	5081 bales
Tuscaloosa.....	2580 "

(and this in view of the fact they did not get started until many weeks after the season opened, and had very close competition)—

Demopolis.....	2183 bales
Greenville.....	5812 "
Leitchfield.....	2295 "
Boligee.....	1418 "
Montgomery.....	1945 "
Rome.....	1041 "
Temple.....	1650 "
Courtland.....	2455 "
Cullman.....	2001 "
Greenbrier.....	1001 "

making total number of bales put up 29,462. Nearly all these plants got started too late to get the first business of the season, and many contracts were closed before the season opened that we could not touch, owing to the delays in getting machinery there (at the plants) and getting started. The coming season will, in my judgment, show results from these same plants of more than double what they did last year. I do not know a plant that made losses, and many of our lessees last year are very anxious to cover more territory the coming season, showing that they are pleased with their result."

A 60-Saw Gin Plant Projected.

A dispatch from Bienville, La., to the Shreveport Times says:

"From present indications it seems highly probable that Bienville will soon have a mammoth gin plant in course of construction. The plant in contemplation is to be supplied with three 60-saw gins run by a 35-horse-power engine. Everything connected with the plant will be up to date in every respect, including the roundlap-system press. Gentlemen representing the American Cotton Co. and different gin companies have been in Bienville this week looking after the interest of their respective companies and offering liberal concessions in order to

induce the gentlemen interested to take hold of and push the enterprise.

"If undertaken, it is safe to say and conclude that the enterprise will be pushed for all that is in it, as the gentlemen who have the scheme in view will not let anything stand in their way of success when they have decided to make investment in any legitimate enterprise. The difference in prices that can be obtained for cotton pressed in round bales will, in the opinion of all fair-minded men, serve to advertise the plant sufficiently to make success certain."

Anniston's \$100,000 Mill Contracted For.

All arrangements have been completed for the erection and equipment at Anniston, Ala., of the cotton factory recently announced as proposed by John H. Noble and associates. The projectors have organized under the title of the Woodstock Cotton Mills Co., capital stock \$100,000, and have chosen officers as follows: Messrs. John N. Noble, James Keith, Jr., W. L. McCaa, William Noble and J. B. Goodwin, directors, and Messrs. John H. Noble and James Keith, Jr., president and secretary-treasurer, respectively. The company has purchased a 10-acre site for the plant and ordered an equipment of 5000 spindles and complement of power, etc., for the production of yarns. Building will be 100x225 feet, to be contracted for next week. There will also be twenty operatives' cottages.

Mills at Anniston.

[Special Cor. Manufacturers' Record.]
Anniston, Ala., April 7.

The incorporation of three different cotton-mill companies, all with home capital, here this week no doubt breaks the record for cotton-mill work, while the fact that all three of the enterprises were inaugurated by home people and financed with home capital and will be operated by home men, shows that Anniston's great advantages as a cotton-manufacturing point are fully appreciated by her people. Anniston already has three mills using raw cotton and three more using cotton yarns, so the three new mills will make a total of nine. Of the mills already in operation, two have doubled their capacity in the last six months and five are operating night as well as day.

The Cotton Movement.

In his report for April 6 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 218 days of the season was 8,328,808 bales, a decrease under the same period last season of 1,851,207 bales; exports were 4,887,072 bales, a decrease of 1,391,547 bales; takings by Northern spinners 2,068,581 bales, an increase of 96,487 bales; by Southern spinners 1,051,020 bales, an increase of 99,477 bales. It will be noted that the increase in the takings by Southern mills this year is now greater than the increase of takings by the Northern mills, and that the aggregate takings by Southern mills is more than one-third of the total takings in the country.

A \$200,000 Plant at Roanoke, Ala.

It was reported several months ago that the W. A. Handley Manufacturing Co. was being formed at Roanoke, Ala. This company has now fully organized and elected W. A. Handley, president; Major Schuessler, vice-president, and Z. J. Wright, secretary-treasurer, and will make early contracts for the erection of buildings and the placing of machinery. The company has purchased site and will build for a 10,000-spindle plant, but only

5000 spindles to be installed at the start. This will make an initial investment of about \$100,000. It is the intention to issue, after the first 5000 spindles are running, bonds for \$100,000 to double the mill as planned.

Anniston's \$100,000 Yarn Mill.

The Anniston Yarn Mills, recently noted as proposed at Anniston, Ala., has completed its organization and elected officers as follows: W. A. Scarbrough, president; James T. Gardner, treasurer and general manager; directors, Messrs. W. A. Scarbrough, A. W. Bell, W. W. Springfellow, W. H. McKleroy, J. B. Goodwin, W. A. Davis, John B. Knox, J. C. Spruill and L. H. Kaplan. The company will invest \$100,000 in the erection of mill for the manufacture of yarns, installing 5000 spindles. The manager is now prepared to receive proposals for furnishing the machinery. Contract for erection of building will be awarded soon.

For Coloring Yarns.

There is now being introduced to yarn manufacturers a new machine and process for coloring their product. John W. Fries of Winston-Salem, N. C., invented and patented the machine and process, and has used it successfully for more than two years. Messrs. A. Klipstein & Co. of New York (P. O. Box 2833) viewed the process and machine, and were so well satisfied with their merit as to take the agency for their sale, and now offer them to the trade needing improved dyeing apparatus. Messrs. Klipstein & Co. are well known as dealers in and manufacturers of chemicals and dyestuffs, especially such as are utilized in textile mills.

A \$135,000 Addition.

Mr. John R. Barron, president of the Manchester Cotton Mills at Rock Hill, S. C., was announced recently as having secured \$150,000 for the erection of a new cotton mill. It has been decided that instead of a separate company owning this factory the amount named will be invested in an addition to the Manchester plant. Contracts have been made for the new machinery, which will include 7000 spinning spindles and 3500 twister spindles to cost about \$135,000. New buildings will be contracted for soon.

The New Mill at Seneca, S. C.

The management of the Seneca Cotton Mills, now under construction at Seneca, S. C., has decided upon extensive enlargements to its mill as originally planned. The company is now building for a 10,000-spindle and 300-loom plant, but the decision is to extend for an equipment of 35,000 spindles and 1200 looms. This will make the enterprise require the investment of about \$400,000 instead of half that sum, as at first proposed. L. W. Jordan is president.

Textile Notes.

B. A. Nolan and others of Senoia, Ga., are endeavoring to organize a \$100,000 cotton-factory company.

The Park Woolen Mills of Chattanooga, Tenn., has had under consideration the erection of a cotton mill, but the latter has not been organized yet.

W. E. Guise of Hamburg, Ark., wants to correspond with some practical cotton-mill man who would be likely to invest in a cotton factory at a favorable location.

Messrs. B. H. Moss, H. G. Smith and R. H. Jennings of Orangeburg, S. C., have incorporated the Orangeburg Knitting Mills, with capital stock of \$10,000.

A \$100,000 company has organized at Cornelia, Ga., to build a cotton factory; I. T. Sellers, president; James Peyton,

vice-president; D. A. York, secretary, and J. T. King, treasurer.

The Van Deventer Carpet Co. of Greensboro, N. C., reported last week as installing a number of new looms, is bringing the additional machinery from its plant at Plainfield, N. J.

The Fulton Bag and Cotton Mills of Atlanta, Ga., in referring to its proposed \$500,000 addition, mentioned last week, says: "We have not taken any steps in the direction named, and are not in position to give any information as yet."

The board of trustees of the Mississippi Agricultural and Mechanical College has accepted the offer of Mr. D. A. Tompkins of North Carolina to furnish free the plans and specifications for the textile school to be added to the institution.

Messrs. R. L. Wilson and J. T. Westbrook of Cordele, Ga., will establish an \$80,000 cotton factory. They have secured a suitable building, and will contract for the installation of 4500 spindles, to consume annually about 3000 bales of cotton.

The proposed company at Laurinburg, N. C., mentioned lately, has incorporated as the Sexton Cotton Mills, capital stock being \$50,000, with privilege of increase to \$150,000. John F. McNair and others are the incorporators. T. C. McEachern will be president.

At Hampton, Ga., \$60,000 has been subscribed for the erection of a yarn mill. The company will elect A. J. Henderson, president; W. M. Harris, secretary-treasurer, and directors, Messrs. P. W. Pullen, W. P. Wilson, H. G. Fields, J. L. Moore, R. J. Arnold and R. F. Smith.

Endeavors are being made at Hartwell, Ga., to secure a definite announcement of the erection of a cotton factory near that town by Boston (Mass.) parties. Messrs. E. B. Benson and J. D. Matheson of Hartwell sold a water-power property to Boston parties last fall, the purchasers stating their intention to develop it for the operation of a cotton mill.

E. M. Bass, who has been promoting a \$200,000 cotton-mill company at Carrollton, Ga., states that he proposes a 6000-spindle and 180-loom equipment. The stock is being readily obtained, and it is expected that the project will soon be assured. The company intends to erect buildings this summer, and will be ready for the machinery early in 1901.

Messrs. Thomas L. Robinson and Walter A. Robinson of Anniston, Ala., announced recently their intention to invest \$50,000 in a new cotton mill. They have now organized the Adelaide Mills to own and operate the plant, and will make arrangements for its immediate erection. Thomas L. Robinson is president; J. W. Wade (of Birmingham), vice-president, and Walter A. Robinson, treasurer; Claud H. Robinson of Anniston and T. W. Wade of Birmingham are also interested.

It is stated that A. S. Hamilton, president of the Trion Manufacturing Co. of Trion Factory, Ga., has completed arrangements ensuring the erection of a 25,000-spindle and 750-loom cotton factory at Chattanooga, Tenn. According to the plan of organization, Chattanooga investors take \$150,000 of the stock and parties whom Mr. Hamilton represents take the remaining \$250,000 necessary to build such a size plant. It is expected that a definite announcement, with full particulars of this project, will be made next week.

A plan is discussed for the construction of a tunnel under the two branches of the Elizabeth river connecting Norfolk, Portsmouth and Berkley.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Cotton Plant's Worst Disease.

Editor Manufacturers' Record:

In that splendid publication of the United States Department of Agriculture, Bulletin No. 33, "The Cotton Plant; Its History, Botany, Chemistry, Culture, Enemies and Uses," a book of 433 pages, now unfortunately out of print, but which every Southern man in the Senate or House of Representatives should demand to have reprinted and placed in the hands of every intelligent planter, no matter what the cost, there are seventy-two pages and twenty-nine illustrations devoted to diseases and insects affecting the cotton plant. Yet the most important of all the diseases which affect the cotton plant's welfare and prevent it from adding to the wealth, prosperity and happiness of the South as it should is not described nor illustrated nor mentioned.

If the cotton plant had blood instead of sap (and I am rather inclined to think many of us at the South do believe the cotton plant has the bluest of blue blood in its veins), I should not hesitate to call this disease "blood poisoning."

Its symptoms are a tendency on the part of some one of our Southern industries depending on the cotton plant to blackguard, villify or take advantage of some other interest dependent on the same plant. When it comes to something affecting the welfare of the whole cotton plant, of all the interests connected with it, and of the whole South as well, there is a general lassitude in all the ramifications of the cotton plant's wide business—cotton planters, oil mills, cotton mills, fertilizer factories, bankers, merchants and railroads—that shows a diseased condition which might well call for heroic treatment.

There is no need to go into details. The way the planters blackguard the round-bale press, the oil mills and fertilizer companies, denounce them as trusts and threaten to throttle them in the State legislatures is the most public manifestation of this disease.

The coolness and apparent indifference with which some of these interests treat such accusations—a fearful mistake, in my humble judgment, and one boding no good to the future—tends to confirm the planters in their opinions. The absence of any active interest, of any open and effective work upon the part of any one of these three manufacturing interests, which are so peculiarly dependent on the cotton plant and on the farmer to help him, to enlighten him and to work in harmony with him, is another alarming symptom of this disease.

None of these interests can either abuse or prey upon the other without hurting itself and the whole South, any more than in the same person the hand can slap or pound the face and not be hurt by it or the mouth bite or eat the arm. If the legs refuse to carry the body it can't move; if the hands refuse to pull it it grows thin and weak; if the head sleeps the whole body sleeps, and no part of the body can suffer without impairing the health of the whole. These statements are so self-evident that it seems almost childish to make them, and yet is it more childish than the conduct of our cotton planters and that of our manufacturing and other interests dependent on cotton planting?

No man hates a trust or unjust monopoly more or has fought harder against

them than the writer of these lines. No man knows better that the farmer does have a hard time of it, or is more anxious to make his burdens lighter and agriculture in the South more profitable.

If the writer has any mission at all, it is to help the cotton States, the South, to make the most out of the cotton plant. Without this plant the greater part of the South would be a dreary, uninhabitable waste. Even with it under our present treatment and economies we are not holding our own in progress with other portions of the United States, instead of being, as we might be, in the very forefront of material progress and wealth in manufactures, commerce and agriculture. We will not and cannot come to this happy condition without a better feeling, more good-will and unity of action between cotton planters, fertilizer factories, oil mills and cotton mills. At present it is, in reference to the cotton plant, every interest for itself and devil take the hindmost!

Why should planters be taught to hate oil mills, fertilizer factories and cotton mills? What would cottonseed be worth today but for the oil mills. If it had not been for the fertilizer companies Texas would today have a monopoly of cotton production, and the old cotton States would long since have been bankrupt. We hope even greater and better things from our cotton mills, and he who would put enmity between them and the planters deserves no merciful treatment.

We are getting now, for the first time in the history of cotton, in a position in the South where we can dictate the price of cotton and cotton goods to the world. In heaven's name let us bend all our energies to perfecting this position, and not go to warring among ourselves!

As to trusts I cannot speak officially for the other industries, but I know of my own knowledge there is no cottonseed trust and no oil-mill trust, and has not been for ten years. This scheme was tried and proved a failure, as I predicted it would, and I helped in my modest way with all the means at my command to smash it. The old cotton-oil trust is now an incorporated company, not even a trust in name, owns less than sixty oil mills, while there are more than 300 other oil mills independent of it and of each other, all scrambling for seed to run four or five months in the year, and paying all for the seed which the markets for the products will justify consistent with a reasonable manufacturer's profit. If there is any individual fortune of as much as \$250,000 made out of cottonseed I do not know it. The oil mills have added millions upon millions to the wealth of the South, and their own share in this wealth has been far below that of any similar industry of like opportunities. Thank heaven we have no Rockefellers or Carnegies in cotton oil!

I want to see the oil mills do yet more for the South. I want to see them making finished products—soap, lard, salad oil. I want to see them encouraging the farmers to exchange their seed for hulls and meal and oil. I want to see them teaching the small farmers to grow cattle and sheep of the best breeds in large quantities, and help them find a good market for their beef, mutton and wool. I want to see the fertilizer factories no longer advising the farmers to depend exclusively on mineral fertilizers, but to build up their worn-out plantations with the manure from these cattle and sheep, so that they can more profitably use the mineral fertilizers and buy more of them in proportion than ever before. I want to see the cotton mills experimenting on cottonseed to determine which will produce the best and finest cotton oil, as

well as cotton fiber, and show the planters which seed is best to use. I want to see planters, oil mills, fertilizer factories and cotton mills present a united front when any national legislation is attempted in any way affecting the cotton plant. If they were united today they might compel Congress to accept this new French treaty that will provide a market for millions of gallons of cotton oil, increasing the price of oil and of seed, enabling cotton to be raised more cheaply and giving us in the South a stronger hold on our staple. If New England attacks our cotton mills I want to see planters, oil mills and fertilizer factories rally to their support. If appropriations are needed to promote agriculture in the South, I want to see all the other cotton-plant interests rally to the farmers' help to get them.

We have not had a fair show in the South in the nation's favors. Now is the time, with our recent splendid record in the Spanish-American war, to get them. Away with division and confusion and backbiting! The time has come for united action on the part of all who get the whole or a part of their living directly or indirectly from the cotton plant. We want cottonseed given the same statistical position in government census returns as wheat, oats and corn. We want the same appropriations for a careful study of the chemistry and economic uses of the cotton plant, fiber, seed and every other cotton product that wheat and flour and other products of the field have had. We want definite and specific appropriations for this purpose given to the Agricultural Department at Washington and to each of our Southern agricultural experiment stations. And all we have to do to get them is to ask for them, for we have at last a Secretary of Agriculture fully alive to the needs of the South.

With such great objects in view it is almost criminal in any Southern writer to make any more "bad blood" in the cotton-plant body, and criminal in any newspaper to publish such rot.

Our industrial cotton-plant family certainly needs a liberal treatment with iron, quinine and strychnine—irons for any man who is found defrauding the planter; strychnine for the professional liar and agitator who is poisoning the minds of the farmers against legitimate investments of capital, and quinine for that lazy, indifferent and "tired feeling" that now seems to pervade every branch of the cotton-plant industry when it is asked to help some other branch that is not able to shake a few dollars down immediately for doing it.

The farmer who spends half a day at the corner grocery whittling a stick, instead of finding something to busy himself with on his farm, is generally denounced as lazy and shiftless; but is he any more lazy than the manufacturer who refuses to think out the conditions that he may have to face in the next ten years and goes on whittling out his own particular fortune regardless of the good of the great industry with which he is connected, and totally indifferent to the proper development of the South by and through the cotton plant?

EDWIN LEHMAN JOHNSON.

Fort Hill, S. C.

Cottonseed-Oil Notes.

Among the foreign shipments from the port of Galveston last week were the following cottonseed products: 9578 sacks of cottonseed meal and 8457 sacks of cottonseed cake for Bremen, and 4489 sacks of cottonseed meal for Antwerp.

The incorporators of the People's Cotton Oil Co. at Selma, Ala., held a meet-

ing in that city on the 3d inst. and elected the following officers: George Craig, Jr., president and general manager, and John E. Axford, secretary and treasurer.

The Portland Cotton Oil Mill of Portland, Ark., has been incorporated, with a capital stock of \$35,000. J. C. Bain is president of the company, with the following directors: D. B. Pugh, J. D. Dean, Justin Mathews, R. A. Pugh, A. C. Stanley and J. A. Dean.

A company was organized last week at Augusta, Ga., to erect a cottonseed-oil mill. The company will have a capital stock of not less than \$40,000. The incorporators of the company are F. B. Pope, A. S. Dunbar, James H. Taylor, J. P. Fleming and Jacob Phinizy.

The Mutual Refining Co. of Charleston, S. C., has called a meeting of its stockholders to be held May 7 for the purpose of increasing its capital stock from \$20,000 to \$100,000. It is said to be the intention of the company to build and equip a first-class cottonseed-oil mill. The oil will then be made in Charleston from the cottonseed and passed to the refinery to be prepared for market.

A new cottonseed-oil mill is to be erected at Greenville, S. C. The company organized to carry out the enterprise will have a capital of not less than \$15,000 or more than \$50,000. Twenty thousand dollars have been subscribed, and the mill will be ready for the next crushing season with a capacity of twenty tons per day. The incorporators are Hugh M. Barton, C. H. Carpenter of Pickens, S. C.; W. E. Cox, W. A. Hawley, S. L. McBee, M. L. Donaldson and J. H. Weir. It is understood that J. W. Griffin will be president, and Wade H. Barton, secretary and general manager.

At New Orleans cottonseed oil has been firmly held during the past week, and the offerings are moderate, with a good export demand, 100,000 gallons going forward to Austin and 250,000 gallons to the Netherlands. The inquiry is brisk for cake and meal for foreign export trade. Receivers' prices are quoted as follows: Cottonseed, nominal per ton of 2000 pounds delivered here for good, sound seed, including sacks; cottonseed meal jobbing per carload at depot, \$22 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., \$24; oilcake for export, \$24 per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, 28 cents per gallon loose f. o. b. tanks here; in barrels, 31 cents; cottonseed hulls delivered per 100 pounds, according to location of mill, 20 cents; linters, according to style and staple—A, 3½ to 4½ cents; B, 2½ to 3 cents; C, 2 to 2½ cents.

Hamilton's Export Cable Code for Cottonseed Products. By G. C. Hamilton, Birmingham, Ala. Price \$3.

Mr. Guy C. Hamilton, the author of this valuable handbook, compiled this cable code covering shipments of cottonseed products for use in his own business, and finding it so convenient and so much more economical than any other code at his disposal, he has published it. As cable words are limited to ten letters, the code words of this book have been made with a view to combining them in such a way as to express sentences and at the same time form a cable word not exceeding the limit made by the company. In this code phrases are expressed by one code word. They cover a great deal of ground at a minimum cost, and two phrase words can be combined so as to make one cable word. It is calculated that an exporter of cottonseed products who keeps up with the foreign markets would save at least \$75 a month in the cost of coding by the use of this code.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., April 11.

In the local phosphate market business has been quiet during the week under review, while prices, as in other fertilizer ingredients, rule very steady. Receipts are better, and during the week several charters, as reported below, indicate a good supply during the present month. Sales of Tennessee and Florida rock are reported at former figures. The following vessels were chartered last week to load phosphate cargoes at Florida ports: Schooner M. D. Cressey, 1884 tons, from Port Tampa to Baltimore at \$2.25; bark James W. Ewell, 1082 tons, from Charlotte Harbor to Baltimore at \$2.50; schooner Star of the Sea, 893 tons, from Port Tampa to Elizabethport, N. J., on private terms, and schooner John Devlin, 1107 tons, Port Tampa to Baltimore on private terms. All indications point to great activity among miners in the Southern phosphate belt, and at all shipping ports in Florida and elsewhere the present month will show unusual activity. The movement among miners in South Carolina continues to show an increasing output, and the local as well as the foreign inquiry is fairly active. The phosphate commissioners are about to start on their tour of inspection of the South Carolina phosphate mines, and their report is looked for with some interest by those engaged in the trade. Of the industry in Florida the most encouraging reports continue to be received, and the development in mining sections and shipments from the ports are very satisfactory. Shipments from Fernandina last month were 12,275 tons, and for the quarter ending March 31 they aggregated 34,859 tons, while the estimated shipments for April are placed at 35,000 tons. Shipments from Tampa and other ports will also be larger than last month. From the Tennessee phosphate field the reports show an increased output. Tennessee phosphate rock from the buyers' standpoint is dull, and there is a lull in the export demand also. It is stated that there is a disposition on the part of certain miners to make slight concessions in prices on all grades for shipment over the summer months.

Fertilizer Ingredients.

The market for ammoniates is strong, with a good demand for prompt goods from Eastern manufacturers, and current offerings are taken promptly at sellers' figures. Futures are strong, and sales of high-grade crushed tankage have been made from May 1 forward on basis of 2.25 to 2.30 and 10, basis Baltimore f. o. b.

The following table represents the prices current at this date:

Sulphate of ammonia (gas).....	\$3 05 @ 3 10
Nitrate of soda.....	2 35 @ 2 40
Blood.....	2 60 @ —
Hoof Meal.....	2 30 @ —
Azotine (beef).....	2 40 @ 2 50
Azotine (pork).....	2 40 @ 2 50
Tankage (concentrated).....	2 25 @ 2 30
Tankage (9 and 20).....	2 35 & 10¢ 2 40 & 10
Tankage (7 and 30).....	19 00 @ 20 00
Fish (dry).....	20 00 @ 25 00
Fish (acid).....	12 00 @ —

Phosphate and Fertilizer Notes.

The city of Wilmington, N. C., has purchased 6000 tons of phosphate rock to be crushed and used on the streets of that city.

The Standard phosphate mines, near Williston, in Levy county, Florida, recently purchased by J. V. Burke, are now in full operation.

The reports of sales of fertilizer tags in Alabama for the quarter ending March 31 amounted to 1,443,110, against 941,700 tags sold last season, an increase for

the present year of 531,410. The cash increase is over \$25,000.

It is stated that Bussey & Son and W. L. Tillman of Columbus will establish a fertilizer factory in that city, the plant to cost \$150,000. Work on it will begin at once.

The whaleback steamer City of Everett sailed on the 2d inst. from Port Tampa, Fla., with a cargo of 3530 tons of pebble phosphate for Cartaret, N. J., from the Land Pebble Co.

The Gainesville Fertilizer Co. of Gainesville, Fla., has changed its name to the Standard Fertilizer Co. The company will conduct business at the same place, and no other change will be made.

The Southern Phosphate Mining Co. of Jacksonville, Fla., has been incorporated, with a capital stock of \$50,000. The incorporators are Isaac Brereton, Frederick W. Howard and Charles S. Adams. The company will mine phosphate and do a general manufacturing business.

A deal was closed last week at Ocala, Fla., which represented a cash transaction of \$85,000. It consisted of a transfer of 1640 acres of land in Alachua county, Florida, by Mr. Ben. T. Boyd to the Central Phosphate Co. of Tennessee. It is said that this phosphate property in the early days of phosphate mining was held at \$50,000.

The shipments of phosphate rock from the port of Fernandina, Fla., for the month of March were as follows: Steamship Rochampton for Ghent with 2725 tons; steamship Dunnobin for Hamburg with 4150 tons; steamship Atlantic for Hamburg with 3250 tons, and steamship Nor for Memel with 2150 tons, making a total of 12,275 tons, and for the three months ending March 31, 34,859 tons. The shipments for the present month are expected to be very heavy, being estimated at 35,000 tons.

The total shipments of high-grade Florida phosphate rock from the port of Savannah, Ga., for the month of March, as reported by Messrs. J. M. Lang & Co., aggregated 12,987 tons, and for the three months ending March 31 the total shipments aggregated 32,375 tons. The Norwegian steamship Olaf Kyrre cleared last week from Savannah, Ga., for Liverpool with 1089 tons of high-grade Florida phosphate rock among her cargo, valued at \$10,890. Other steamers cleared with 6224 tons for Bremen, Antwerp and Rotterdam.

The market for cottonseed products in Texas has been quiet during the past week, with values steady. Crude oil, loose, has been offered freely, and there has been considerable Western demand, with good buying from Eastern dealers. Cottonseed meal and cake are in demand for export. Quotations in open market range as follows: Prime crude oil, loose, 27½ to 28 cents, and prime summer yellow oil, 31 to 31½ cents; linters, per pound, 4¼ to 5 cents, all f. o. b. mill Texas interior points; hulls, baled, \$5 per ton; prime cottonseed meal and cake, \$22 to \$22.25 delivered at Galveston. Houston mills are paying \$12 per ton for cottonseed f. o. b. interior towns.

E. G. Mallard and T. W. Boyle, president and secretary, respectively, of the Mallard Lumber Co. of Greeleyville, S. C., have made arrangements to operate the Cagle Wood Works in Greenville, S. C. The business of the company will consist in the manufacture of shuttles and bobbins for cotton mills, and general wood work. The firm has already secured a number of contracts throughout the cotton-milling section of the State.

MECHANICAL.**Stilwell's Cast-Iron Heater.**

When water contains acids, salt or other impurities which pit or corrode wrought iron or steel it is desirable to use

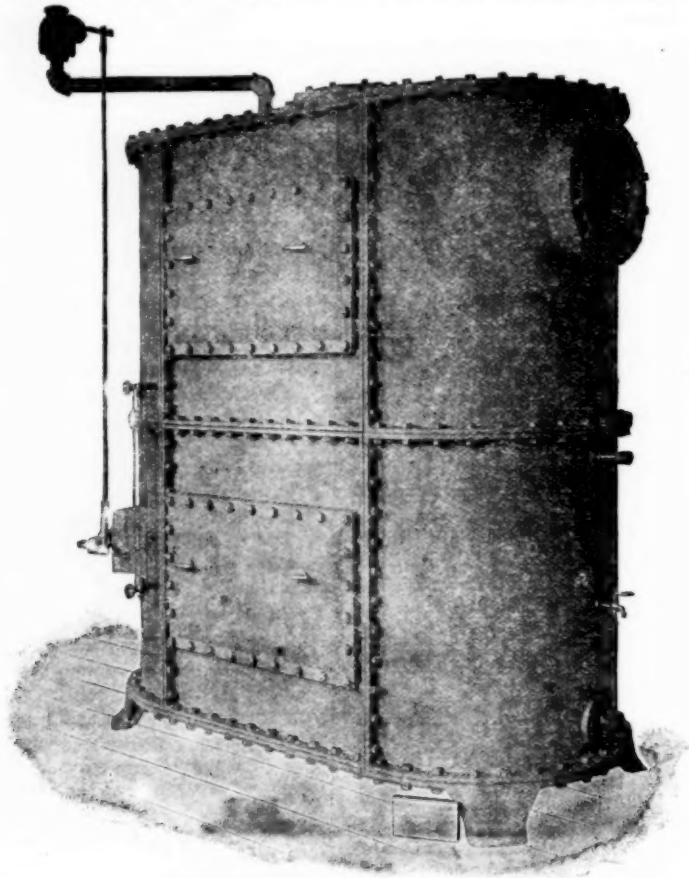
steam passes into the heating chamber. The construction of the receiving chamber is such as to prevent shock and breathing of the heater, which would result from admitting the exhaust from high-pressure engines direct into the heating chamber.

Steam is admitted to the heating cham-

ber with hot water. It also serves as a settling chamber, and a receptacle for the condensation returned from radiators or heating coils used on the premises. This chamber is provided with two floats, one for regulating the inflow of feed water and one for regulating the overflow, thus affording a double

Ornamental Wire Work.

The working of wire affords many opportunities for the production of articles that are not only of great utility, but of an ornamental nature also. In equipping offices and other business establishments requiring railing, counters and similar



STILWELL'S CAST-IRON HEATER.

a feed-water heater made entirely of cast iron, which is much more impervious to such action.

We illustrate a latest improved cast-iron heater and call attention to its superior points of excellence, reference being made to the sectional view.

The incoming exhaust steam impinges

ber from the receiving chamber through two rectangular openings, which extend nearly across the plate that separates the two chambers. Two long continuous streams of steam are thus directed into the body of water which is falling constantly in thin sheets over the edges of the oval-shaped pans, thus presenting the

safeguard against flooding the heater.

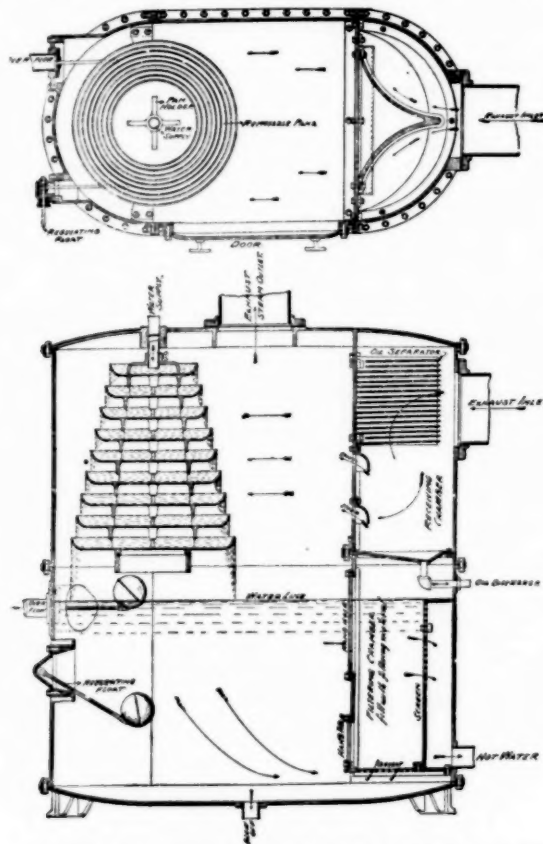
The filtering chamber filters upward, thereby retaining any soft material at the bottom of the heater, where it can be blown off.

The chamber for filtered water contains a large supply of hot filtered water, from which the boiler-feed pump draws its supply.

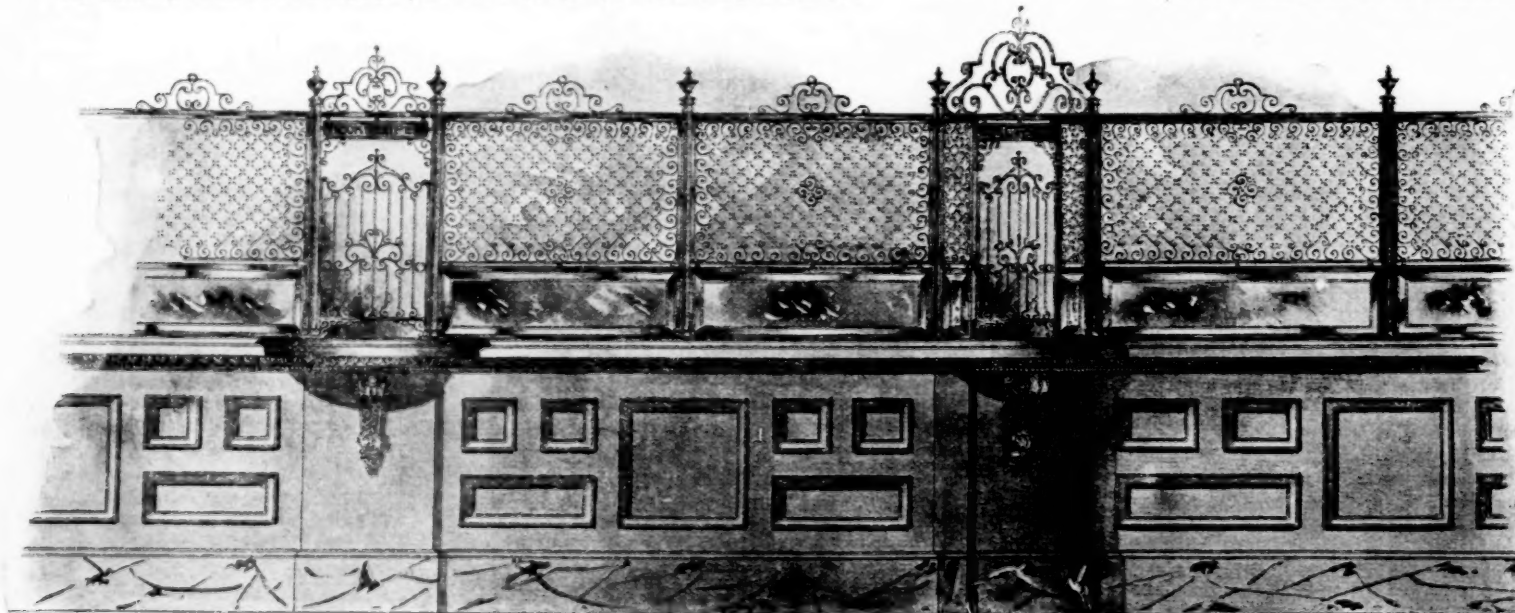
outlets, the artistic as well as the useful is generally given consideration.

The E. T. Barnum Wire and Iron Works of Detroit, Mich., is an establishment that has been most prominent in this line of production.

Herewith we show a half-tone reproduction of a handsome bank counter and metal railing made by the company for



STILWELL'S CAST-IRON HEATER—SECTIONAL VIEW.



BANK COUNTER AND METAL RAILING.

E. T. BARNUM
DETROIT, MICH.

upon the conical deflecting plate, which is provided with grooves, and which separates the cylinder oil, carrying it to sides and bottom of the chamber to the opening marked "oil discharge." This deflecting plate also carries the steam downward, as indicated by the arrows, to the two rectangular openings through which the

best possible conditions for transferring the heat in the steam to the water. The uncondensed steam escapes freely from the top of the heater, and the construction is such as to prevent carrying water out with the escape steam.

The lower portion of this heating chamber is a reservoir of large capacity filled

Quick and easy access through large doors and handholes is had to every part of the heater.

Further particulars and prices may be had upon application, with a statement of your requirements, to the manufacturer, the Stilwell-Bierce & Smith-Vaile Co., Dayton, Ohio.

the First National Bank of Groton, N. Y. This is a fair specimen of the class of work the firm manufactures. The company recently purchased the plant, stock and patterns of the American Brass and Metal Works of Detroit, and combined them with its own extensive collection. Has also equipped the wood-

working, marble and brass departments with the latest improved machinery, and is in a position to execute this class of work even better than formerly. The name and reputation of the E. T. Barnum Wire and Iron Works are well known to the trade, and they need no introduction. A beautifully-illustrated catalogue is issued each spring, which embraces all the modern designs of counters and metal work, and a copy, with book of testimonials, may be had on application.

Merwarth Metallic Gasket.

In connections by joints it is important that the joint shall be perfectly made. Gaskets have been used widely for this purpose, and the improved gasket which we here illustrate should prove of much

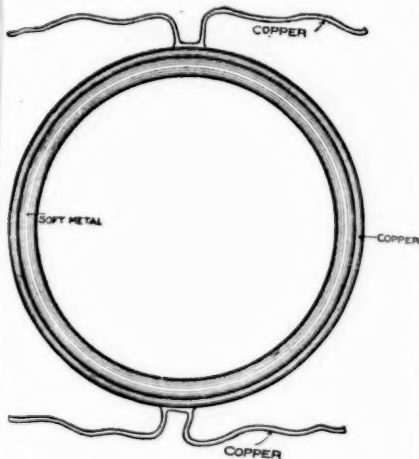


FIG. 1—THE STANDARD MERWARTH METALLIC GASKET.

interest to operators of industrial plants and other manufacturing establishments wherein such a device is demanded. This gasket its maker claims to be efficient, durable and economical.

The Merwarth metallic patent gasket consists of a soft metal ring of about one-eighth inch diameter, brazed to a reinforcing ring of copper one-sixteenth inch thick, with two short pieces of thin, soft copper wire attached at opposite sides to hold the gasket in position when being placed in service.

The accompanying drawings will indicate the essential features of the device and serve to show how installations should be made in order to secure perfect service.

Fig. 1 shows the ring of soft metal attached to and reinforced by the ring of copper and the guide wires.

Fig. 2 shows a flange in section with

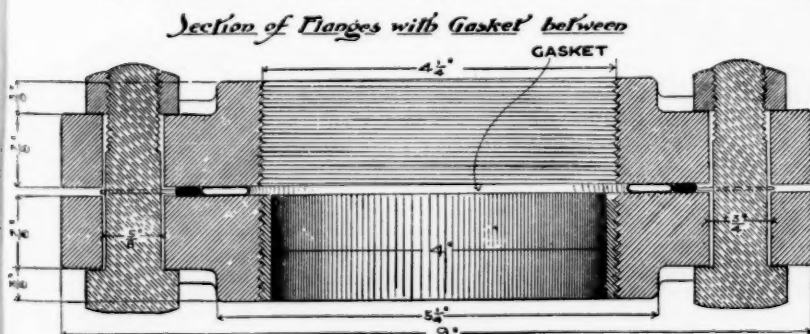


FIG. 2.

the gasket in place and the flange bolts pulled down as far as they need go. It will be noted that enough pressure has been brought to bear on the flanges by means of the bolts to squeeze the soft metal ring perfectly flat and slightly distort the copper; in fact, enough pressure to give a slight concave appearance to each of the iron flanges. This result is essential to the making of a perfect joint,

and if care is taken to have the work done in this manner it will last indefinitely without further attention.

It will readily be seen that the soft metal forming the inner ring is sufficiently ductile to take any impression that may exist in the cast-iron or steel surfaces between which it is used, filling the inequalities fully, so as to insure a perfectly tight joint. Backed by the strong copper ring to which it is brazed, it will stand up against the disturbance of ordinary expansion and contraction, vibration, etc., for years.

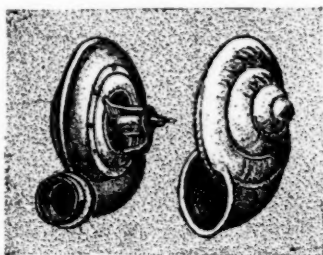
In the case of cylinder heads and other large surfaces that call for more or less frequent detachment, the Merwarth is particularly valuable, as it can be removed and replaced without the delay and annoyance of having to clean the surfaces.

These gaskets are in use up to sixty inches in diameter, and it is claimed the larger the diameter the more satisfactory to the user, for the reason that these large surfaces have heretofore been exceedingly difficult to keep tight.

This gasket is made for any size or design of joint, and the maker will furnish a sample for test use to those interested, and prefers taking for test the joint that is giving the most trouble to keep tight. For further particulars address the Merwarth Metallic Gasket Co., South Bethlehem, Pa.

Rotary-Fan Shapes.

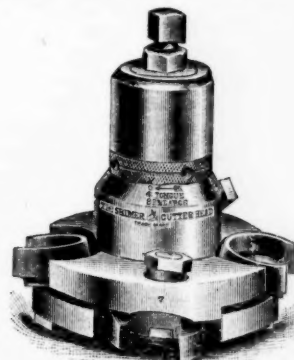
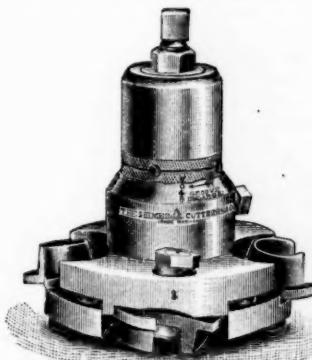
In a recent issue of Machinery Mr. W. H. Sargent makes a novel comparison between the shape of certain well-known mechanical devices and that of familiar natural objects. "Take, for example," he says, "a rotary fan or blower, and one is so struck with the resemblance to a snail shell as to warrant the belief that



the designer was familiar with such shells and recognized the suitability of the design as a guard to cover delicate and easily-injured parts. There could hardly be greater contrast than between the swiftly-revolving fan and the slow-moving snail, yet it is difficult to resist the

Twentieth-Century Tools.

In these days of brisk competition, the saving of time, labor and material is the chief thing to be desired in selecting tools for the planing mill, rather than the saving of a few cents in the purchase of a poorer equipment. According to the evidence of practical men who are using them, economical and paying tools for any woodworking establishment are the Shimer cutter-heads with expansion, made with four, six or eight bits in line of cut, as may be desired, either from solid steel forgings or bronze castings.



THE SHIMER EXPANSION MATCHER HEADS WITH AUTOMATIC STOPS AND FIGURES.

These tools are up to date in every particular, and have all the "make-ready" necessary for their line of work built into them, and the bits will cut the same pattern until the entire circle (about four inches of cutting edge) is used up, when their exact duplicate can be secured by giving the number of the heads. This in itself is a great advantage to the planing mill, to have all flooring, siding or partition match, whether made in the same year or not. In the past mills using home-made knives have been obliged to sacrifice small lots left over from contracts, because if filled in with another contract the fit was so poor that there were always objections from those using the material. The expense of making home-made knives is another item which few consider in its true light. The cost of the raw steel and the time of a man in filing the knives to shape often exceeds the cost of the Shimer circular bits with their shape turned into them, a fixture that lasts as long as there is any of the bit left, to say nothing about being always ready for work and plenty of it.

in a perpendicular line with the pointer on the spanner nut. The pointer will also stop between the figures for every one-third of each one-sixty-fourth of an inch, thus making a very fine adjustment to match tight or loose.

The special incline of the bit seats and the shape of the bits allow the overcut to be made on head or bevel edge car siding and partition without any friction on the bits; consequently there is no burning of the lumber or lost power, as is the case with other makes. The bit seats are preferably depressed about the bolt hole, causing the bits to rest within bit sock-

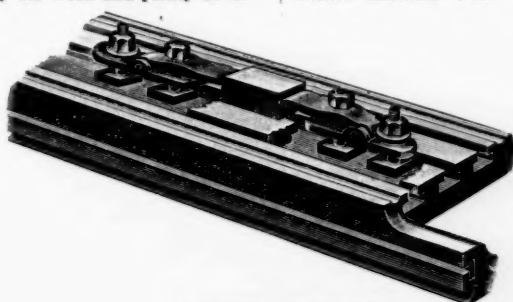
ets, so that the head metal may relieve the bolt of the excessive lateral pressure that results when occasionally the drive belt to the cutter-head falls off while the board is being fed into the machine.

Many other improvements are also embodied in these up-to-date tools, which lack of space forbids mentioning here, but which will be appreciated by the planing-mill man who is wide-awake to his opportunities and desires to be a little ahead of the procession.

Full particulars about these tools and other up-to-date specialties will be sent on request by the manufacturers, Messrs. Samuel J. Shimer & Sons, Milton, Pa.

Machinists' Clamp.

An illustration is here given of a clamp which will prove a boon to the busy machinist. This device is a time-saver, it facilitates accuracy, and its convenience will be at once recognized by those who have use for such a clamp. It can be used on a milling machine, planer or any surface machine tool. It will injure



MACHINISTS' CLAMP.

neither the table or the slots, nor interfere with the working surface. More might be said of this new clamp, but its many superior points of excellence are patent to the observer. The manufacturer, the Ranz-Lambrech Stamp Tool & Manufacturing Co. of St. Louis, Mo., offers the clamp at a low price and states its willingness to refund to anyone who does not find the device entirely satisfactory. Circulars furnished on application.

A dispatch from Anniston states that the Central Pipe & Foundry Co. of that city has received an order for another large shipment of sanitary piping for Honolulu.

These expansion heads are made with stops and figures, so that any change in the size of the tongue or groove can be made in an instant and the change read on the figures about the head. By studying the illustrations of the heads accompanying this article it will be observed that by turning the expansion ring the way the arrow points the size of the tongue or groove is increased, viz.:

Any one set of bits made to cut a groove one-quarter inch wide with the pointer at 0 will expand to cut the groove three-eighths inch wide when the pointer indicates the figure 8. You read the thickness added to the tongue or groove by the figures (representing sixty-fourths)

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,

Baltimore, Md., April 11.

The volume of business in the local lumber market during the past week has been only moderate, and in many departments of the lumber industry trade is quiet. Local dealers are not in the market to any great extent, but are only purchasing to supply immediate necessities. In North Carolina pine the demand from out-of-town buyers is steady, and has developed considerable business in first-hand stock. Rough air-dried lumber is in good supply, but the inquiry from the usual sources is not urgent. Prices for all desirable grades of kiln-dried North Carolina pine seem to be very steady, and sales reported are at full figures. There is a good demand from foreign sources, and several large orders have been placed with local companies during the past week. White pine still holds its own, and the market has ruled firm, with a fair demand and supply. The hardwood business has shown no new features, but the situation is fairly encouraging, and the demand from nearby towns for certain grades of oak, ash, poplar and other woods is still very decided. Dry stock is still scarce, and some mills in the interior under present rates of freight are holding their stock. The foreign export trade is quiet, although some Baltimore shippers are forwarding considerable lumber from Norfolk and Newport News.

Savannah.

[From our own Correspondent.]

Savannah, Ga., April 9.

The week under review has been one of a fairly active character in all lines of the lumber trade at this port. The demand continues steady, and mills at all adjacent points are generally crowded with business. The limited supply of yellow-pine timber is the cause of considerable thought on the part of manufacturers. At a meeting of the Georgia Saw-Mill Association, held at Tifton on the 6th inst., it was decided to run the mills of members of the association on two-thirds time. This step taken by millmen will thus reduce the output in this State about one-third. Prices are remarkably firm for desirable lumber, and on Saturday last the market closed as follows: Minimum yard sizes, \$14 to \$15; car sills, \$16 to \$16.50; difficult sizes, \$16.50 to \$25; ship stock, \$25 to \$30; sawn ties, \$12.50 to \$13, and hewn ties, 33 to 35 cents. A feature of trade is the extraordinary movement in crossties, for which there is a good demand at the moment. The nearby port of Brunswick is enjoying a splendid trade in timber and lumber; also a very extensive business is being done in crossties. One firm alone is now loading the five-masted schooner Helen M. Martin of New York with a cargo of about 36,000 crossties. Mills at St. Simons and other milling sections are all running on full time, and are well supplied with orders. At Darien, Ga., the month of March was a very satisfactory one to both timber buyers and sellers. There is more activity in shipping at present than ever before in the history of the lumber and timber industry of that port. Over \$240,000 was paid out during the month of March for timber by those engaged in the trade, while the shipments of lumber and timber for the month amounted to over 12,000,000 feet. Receipts of both cypress and pine timber

are expected to be very heavy during the present month at Darien. The total shipments from Savannah last week amounted to over 5,000,000 feet of lumber, all to Northern ports. The foreign demand is better, and during the week pitch-pine timber and deals were shipped to Liverpool valued in all at over \$10,000. Lumber freights are a shade easier, rates being quoted as follows: To Baltimore, \$5.75; to Philadelphia, \$6; to New York, \$6.50 to \$6.75; to Boston and Portland, \$7 to \$7.75, and to Havana, \$7 per thousand feet.

Pensacola.

[From our own Correspondent.]

Pensacola, Fla., April 9.

The general business of this port has in the last decade grown to greater proportions in every avenue of commerce and industry, and the volume of trade during the past three months indicates a phenomenal movement for the present year. In the primary industry of timber and lumber of this port the shipments for March aggregated nearly 30,000,000 superficial feet. The high rates of freight on foreign tonnage has restricted shipments in every line of the foreign export trade, but with easier rates the volume of business would show much greater figures. Under present conditions, however, the outlook is encouraging, and at present lumbermen are vigorously developing their timber lands, and manufacturers have no trouble in getting all the orders they want for the output of their mills. The charters reported during the past week were as follows: Norwegian bark Michael Berentsen, 611 tons, from Pensacola to Buenos Ayres with lumber at \$13.50; schooner Hattie B. Simpson, 1178 tons, from Pensacola to Philadelphia with ties at 23 cents; a German bark, 1194 tons, from Pensacola to Buenos Ayres with lumber at \$13.12½; a schooner, 206 tons, from Pensacola to Washington with lumber at \$9 and shingles \$2, and the German bark Rialto, 1198 tons, from Pensacola to Buenos Ayres with lumber at \$13. July. The shipments of timber and lumber last week from this port aggregated 11,565,500 superficial feet, nearly all of which went to foreign ports.

Mobile.

[From our own Correspondent.]

Mobile, Ala., April 9.

The quarter ending March 31 has shown a most wonderful expansion in all lines of commerce and industry at this port. Not only in the timber and lumber industry has the improvement been most decided, but in all departments of trade the situation has been in a very satisfactory shape. It is stated that the commercial growth of the port so far this year has been phenomenal. The exports for the fiscal year ending June 30 are expected to reach \$14,000,000, while for the nine months ending March 31 the exports reached the \$12,000,000 mark. The imports for the same time reached \$2,000,000, to which a half-million will be added in the three months to come. The timber and lumber trade has shared beautifully in the general business of the port, and the shipments so far since September 1, 1899, are a good index to trade as compared with previous years. Since September 1, 1899, the shipments of lumber alone aggregate 92,087,917 feet, and for the corresponding period last year they amounted to 41,571,875 feet. The record of the past week exceeds in volume that of any during the past several years, the shipments of lumber alone amounting to over 5,000,000 superficial feet, of which 1,650,000 feet went to Havana and San Juan, P. R. The shipments of timber to the United Kingdom and Continent were unusually heavy during the

week, nearly 700,000 cubic feet of sawn timber going forward. The movement in timber has been rather dull for some time past, but as receipts are better and tonnage rates a shade easier there is more activity. Sawn timber is firm at 15 to 15½ cents per cubic foot, and hewn timber at 16 cents per cubic foot. Hewn oak is in good demand at 15 to 18 cents per cubic foot, and poplar at 12 to 13 cents. The lumber trade at all milling points in this section of the State and Mississippi is active, and the demand was never better than at present. Prices continue steady, with stocks showing but little accumulation. The demand is principally from Cuba, South and Central American ports and Europe. Exporters generally are united in the opinion that the present year will be one of unusual activity in all avenues of the lumber and timber industry.

Beaumont.

[From our own Correspondent.]

Beaumont, Texas, April 9.

In the general lumber market of this section the month has opened with considerable activity, and with several features of the trade slightly changed. The active demand brought about by the building sections has been partially satisfied, and as the agricultural sections are now confining their attention to crops, building operations for the moment will cease. There is, however, other avenues of trade from which may be expected the usual amount of orders. The home and foreign export demand for lumber has commenced, and from railroads some very handsome orders are already filed. Indications point to unusual activity in business from these sources, and already considerable trade with Liverpool has been developed. The Morgan Lumber Co. cleared last week the British steamship Highington for Liverpool with a full cargo of timber and lumber. That firm is also loading the steamship Westwater at Sabine Pass and is also making shipments by way of Galveston. Prices for both home consumption and the foreign trade continue to rule firm, and those familiar with the course of the market predict a large export business during the summer months. At Sabine Pass there is a very active movement among lumbermen, and the exports generally from this port are likely to be materially increased during the present year.

Lumber Notes.

The old Albemarle Lumber Co.'s saw-mill at Elizabeth City, N. C., is now being put in thorough repair, and will be operated in future by the Blades Lumber Co.

The Kyle Lumber Co. of Gadsden, Ala., has purchased the timber right on several hundred acres of the finest long-leaf yellow pine in the State, located near that town.

Receipts of lumber at the port of New Orleans for the week ending April 6 aggregated 1,941,000 feet, and for the season 65,153,652 feet, against 57,781,700 feet last season.

At Nolansville, Tenn., and vicinity there is unusual activity among saw-mills, and shipments of oak and ash lumber to Nashville were very heavy during the month of March.

A. J. Asher's large lumber plant at Pineville, Ky., a dry-kiln, machinery and lumber were destroyed by fire last week. The loss is estimated at over \$10,000, with a partial insurance.

The large planing mill and other buildings belonging to the Hyndman Woodworking Co. at Hyndman, Pa., were destroyed by fire on the 3d inst., entailing a loss of \$30,000, partly insured.

The Morton-Lewis-Wiley Lumber Co.

of Bristol, Tenn., is making preparations for the construction of a branch railway in order to reach the timber lands recently purchased in the Holston valley.

The five-masted schooner Helen M. Martin was loading on the 2d inst. at Brunswick, Ga., a cargo of 36,000 crossties, the shipment being made by the exporting firm of N. Emanuel & Co. of that port.

The fire at the Clark & Boyce Lumber Co.'s plant at Jefferson, Texas, on the 5th inst. consumed the planer and the entire lumber-yard, consisting of 1,500,000 feet of lumber. The mill and shops were saved.

Shipments of lumber and other wood products from the port of Savannah last week to Northern ports aggregated over 5,000,000 feet, while foreign shipments of pitch-pine timber and deals amounted in value to over \$10,000.

S. R. Harned of the Cumberland Furnace, Tennessee, has made a contract with a shuttle and spool factory to furnish it with dogwood and other wood used in manufacturing. Mr. Harned is a member of the firm of J. W. Harned & Bro., who operate extensive axe-handle factories in Tennessee.

Mr. John T. Jarrett of Charleston, W. Va., who is engaged on a contract to furnish timber on Lower Loup for the Loup estate, is getting out some remarkably fine timber. Last week he cut and marketed two trees, the finest of yellow poplar, making four logs each sixteen feet long, which cut 19,725 feet.

W. T. & Henry Sines of Oakland, Md., have sold to the Mackie Lumber Co. of Piedmont, W. Va., a tract of 800 acres of timber land seven miles north of Oakland. The purchasers will build a large lumber mill, and it is thought that this enterprise may be the means of extending the Chesapeake & Ohio Railroad to Oakland.

The month of March was one of great activity at Darien, Ga. Timber buyers and sellers enjoyed a very satisfactory business, and during the month \$240,000 was paid for timber. Receipts and shipments of cypress and pine timber and lumber for the present month are expected to largely exceed those of March.

The Coketon Lumber Co.'s milling plant on the line of the West Virginia Central Railway, of which Rumbarger Bros. of Philadelphia and Elkins, W. Va., are the principal owners, has just been put in operation. R. R. Rumbarger of Elkins will manage the plant, which will have a capacity of about 75,000 feet of lumber per day. The company owns a tract of timber land containing 15,000 acres, through which they will build a lumber railroad.

A company has been organized at Chattanooga, Tenn., to manufacture coiled hoops, headings and staves for slack cooperage, shingles, laths and head linings. The promoters of the enterprise are Messrs. G. W. Meyer, W. A. Meyer, H. Meyer, J. F. Ferger and E. Ferger. The company will erect a plant 80x100 feet, besides dry-kilns, saw-mills, etc. The site will be located this week, after which work on the buildings will commence immediately.

The Georgia Saw-Mill Association, representing some 300 yellow-pine mill plants in Georgia, South Carolina and Florida, at a meeting held at Tifton, Ga., last week decided that on and after May 10 all mills belonging to members of the association will be run on two-thirds time. This action on the part of the association will decrease the output of yellow pine in these States about one-third. The limited supply of yellow-pine timber in sight is said to have been the cause of the step taken by the association.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Andalusia—Saw-mill.—The Williams Investment Co., Savannah, Ga., is negotiating a sale of 35,000 acres of land near Andalusia, upon which a saw-mill with daily capacity of 50,000 feet will be erected.

Anniston—Cotton Mill.—The cotton mill lately reported to be erected by Thomas L. and Walter A. Robinson at a cost of \$50,000 has organized as the Adelaide Mills, with Thomas L. Robinson, president; J. W. Wade (of Birmingham), vice-president, and Walter A. Robinson, treasurer.

Anniston—Cotton Mill.—The Woodstock Cotton Mills Co. has been organized to build the 5000-spindle cotton-yarn mill recently reported as proposed by John H. Noble and associates; buildings contracted for and machinery ordered to cost \$35,000; John H. Noble, president; James Keith, secretary-treasurer.

Anniston—Saw and Shingle Mills.—A company organized for the manufacture of lumber and shingles has completed mill with capacity of 50,000 shingles and saw-mill of 10,000 capacity at Lincoln. For particulars address Walton G. Hardin, Postal Telegraph Co.'s office.

Anniston—Iron Mines.—J. M. Sproull of Anniston and Dr. Jones of Chicago lately purchased iron lands near Anniston; will open mines.

Clanton—Canning Factory.—Judson Strock contemplates establishing a canning factory.*

Florence—Telephone System.—A telephone line will be constructed from Florence to Rogersville. Address T. C. Andrews, Rogersville.

Florence—Soap Factory.—Paul Pittman will build a soap factory with capacity of about 3000 pounds per day.

Greenville—Paper Mill.—R. Thomas has interested New York capital and will erect a \$250,000 paper mill in Greenville.

Jacksonville—Cotton Mill.—George P. Ide, cashier Tredegar National Bank, is endeavoring to organize a stock company for the establishment of a cotton mill.

Jacksonville—Mineral Lands.—Jas. Crook, president of the Alabama railroad commission, and S. D. G. Brothers of Anniston have optioned 8000 acres of mineral lands

from the Jacksonville Land Co. in and around Jacksonville. It is reported that the above-mentioned parties are acting for Eugene Kelly of the East & West Railroad.

Little Warrior—Coal Mines.—The Globe Coal Co. will open a new mine.

Montgomery—Ice Plant.—W. J. Black, manager of the Southern Cotton Oil Co., and associates will build a 25-ton ice plant; machinery contracted for.

Roanoke—Cotton Mill.—The W. A. Handley Manufacturing Co., reported recently as organized with capital stock of \$100,000, intends to build, as soon as contracts can be arranged, a 5000-spindle mill, which equipment will be increased to 10,000 spindles after first 5000 are running; W. A. Handley, president; Major Schuessler, vice-president, and Z. J. Wright, secretary; no contracts awarded yet.

Selma—Cotton-oil Mill.—The People's Cotton Oil Co., lately reported incorporated, will build a 60-ton cottonseed-oil mill; John E. Axford, secretary and treasurer.

ARKANSAS.

El Dorado—Water Mains.—The city will lay 2800 feet of new water mains at a cost of \$3500; N. C. Marsh, mayor.

Hamburg—Ice Plant.—The Monticello Ice Co. will install new 10-ton ice plant. Address care of Windes Lumber Co.*

Hamburg—Lumber Mill.—The Windes Lumber Co. has organized, with capital stock of \$20,000, for manufacturing lumber, by E. B. Windes, J. C. Narcott and J. F. Franklin.*

Hamburg—Cotton Mill.—W. E. Guise contemplates establishing a cotton mill, and expects to interest a practical operator.

Harrison—Mining.—The Vandalla Mining Co. has been incorporated, with capital stock of \$50,000, by H. C. Doyle, president; Frank R. Greene, secretary, and Charles R. Capps, treasurer, for the development of 1400 acres of mineral land in Boone and Newton counties.

Mountain Home—Mining.—The Hawkeye Mining Co., E. Pleas, president, lately reported incorporated, will build a 100-ton concentrating plant. Address for the present Oologah, Ind. Ter.*

Newport—Cotton Compress.—The Union Compress Co. will probably rebuild its compress, lately burned.

FLORIDA.

Anthony—Oil Mill and Fertilizer Factory.—The Anthony Truckers' Union will establish an oil mill for shelling, grinding and extracting oil from the velvet bean, and erect a fertilizer factory.*

Ashmore—Saw-mill.—Branch & Tally of Dixie, Ga., will establish saw-mill at Ashmore; machinery purchased.

Jacksonville—Phosphate Mining.—The Southern Phosphate Mining Co. has been incorporated to conduct phosphate mining and manufacturing business, by Isaac Brereton, Frederick W. Howard and Chas. S. Adams; capital stock \$50,000.

Key West—Cigar Factory.—Chartered: Celestino Palacio & Co., for the manufacture of cigars, with Ferdinand Hirsch, president, and Charles Baker, vice-president; main office will be in New York.

Kissimmee—Sugar Refinery.—Henry Bloomington of New York, representing a number of capitalists, is investigating with a view to establishing a sugar refinery at Kissimmee.

Lake City—Shingle Mill.—Barefoot & Spinks are erecting a shingle mill, as lately reported; capacity 50,000 shingles per day.

Orlando—Pickle Factory.—E. E. Bennett will establish a pickle factory at Lemon Bluff.

Rosburg—Kaolin Deposits.—Kaolin deposits have been discovered on the property of C. A. McIntosh, and will probably be developed.

Tallahassee—Saw-mill.—W. T. Owens (of Georgia) will establish a saw-mill.

Tampa—Sugar Refinery.—It is reported that a \$1,000,000 company has been formed under the laws of New Jersey to establish a sugar refinery at Tampa. Address J. L. Alhut, who is promoting the enterprise.

Tampa—Bridge.—A resolution has been introduced in the city council appropriating \$2000 for construction of bridges across Spanishtown creek. Address "The Mayor."

Tampa—Cigar Factory.—The Sanchez & Haya Company will enlarge its cigar factory.

GEORGIA.

Arlington—Electric-light Plant.—H. W. Graves is installing an electric-light plant.*

Atlanta—Plating, etc., Works.—The Atlanta Plating & Manufacturing Co. has established plating and polishing works at 68 South Forsyth street.

Atlanta—Cotton Mill.—The Fulton Bag and Cotton Mills, reported during the week (under Augusta by error) as to enlarge its mill, states that it has not taken any steps in the direction mentioned.

Atlanta—Confectionery Factory.—The F. E. Block Co. has had plans made and will award contract for a new confectionery plant.

Atlanta—Machine Shop.—The city is erecting machine shops for repairing water meters, water-works machinery and other city machinery; cost \$7500. W. W. McAfee is the contractor. Address "City Water-Works Superintendent."

Augusta—Cotton-oil Mill.—The company reported during the week to incorporate, with capital stock of \$40,000, by F. B. Pope, J. P. Fleming, James Taylor, A. S. Dunbar and others, will be known as the Planters' Cotton Oil Co.

Baxley—Cotton-oil Mill, Ginnery, etc.—P. H. Conas, L. W. Johnson, C. W. Deen, S. A. Crosby and others have incorporated the Conas Manufacturing Co. to manufacture cottonseed oil, fertilizers, to gin cotton, etc.; capital stock \$10,000.

Billow—Flour Mill.—A. A. Simonton is erecting a roller flour mill.

Carrollton—Canning Factory.—A canning factory will be established. J. K. Redwine is promoting the enterprise.

Carrollton—Cotton Mill.—A company is being organized, with capital stock of \$200,000, for establishment of cotton mill, as reported lately; 6000 spindles and looms in proportion will be installed. Address E. M. Bass.

Colquitt—Saw-mill.—A saw-mill with daily capacity of 40,000 feet will be erected. Probably Williams Investment Co., Savannah, Ga., can inform.

Columbus—Fertilizer Factory.—Bussey & Son and W. L. Tillman will remove their fertilizer factory from Girard, Ala., to Columbus and enlarge it; will have a \$150,000 plant.

Columbus—Street Paving.—The city will expend \$16,000 in paving two streets with vitrified brick. Address "The Mayor."

Columbus—Cotton Mill.—Walter Weaver will organize a stock company for establishment of a cotton mill.

Cordele—Cotton Mill.—R. L. Wilson and J. T. Westbrook have purchased building and will equip it with 4500 spindles for manufacture of yarns and operating as the Cordele Cotton Mills; capital stock \$80,000.

Cornelia—Flour Mill.—Rogers & Galloway are building a \$10,000 flour mill.*

Cornelia—Cotton Mill.—A company has been organized for the establishment of a cotton mill, with I. T. Sellers, president; James Peyton, vice-president; Dr. D. A. York, secretary, and J. T. King, treasurer; capital stock \$100,000.

Dahlonega—Gold Mines.—The Pioneer Exploitation & Development Co. has organized, with W. W. Murray, president; J. H. Moore, general manager, and J. F. Moore, secretary and treasurer.

Eldorado—Saw-mill.—A saw-mill with capacity of 20,000 feet per day will be erected. Probably Williams Investment Co., Savannah, Ga., can inform.

Gainesville—Lime-kiln.—C. L. Dean will install new machinery, increasing capacity of his lime-kiln to 200 barrels per day; present output sixty barrels per day.

Hampton—Brick Works.—Field & Henderson have established brick works.

Hartwell—Cotton Mill, etc.—Last October it was announced that J. D. Matheson and E. D. Benson had sold a water-power near Hartwell to Boston (Mass.) parties, who intended to develop power and erect a cotton factory to utilize it. Endeavors are now being made to secure a definite decision and the completion of arrangements to build the plant.

Lagrange—Saw-mill, Coffin Factory, etc.—The Mutual Aid Society (negro organization), recently reported as having completed its saw-mill and to erect a coffin factory

with daily capacity of fifty coffins, has been incorporated by Lindsey Johnson, John Johnson, James Brown and others.

Macon—Machinery Works.—A. D. Schofield, J. S. Schofield and others have incorporated the J. S. Schofield's Sons Co. to manufacture and deal in machinery of all kinds; capital stock \$100,000.

Macon—Brick Works.—The Central City Brick Co. has been organized for manufacturing brick. Address D. W. Jeter, general manager.

Newnan—Cotton Mill.—The Newnan Cotton Mills will increase its capital stock from \$100,000 to \$200,000 to erect another mill; equipment of mill is 6300 spindles.

Rockmart—Marble Quarries.—W. E. Hughes, president of the Hughes Granite & Marble Co., Clyde, Ohio, has leased marble lands near Rockmart and is organizing a \$40,000 company to develop.

Savannah—Shoe Factory.—E. L. Okarma, Charles Marks, Chas. F. Fulton and others have incorporated the Okarma Shoe Manufacturing Co., with capital stock of \$50,000, for establishment of the shoe factory reported last week; capacity 300 pairs per day.

Senola—Telephone Company.—The Senola Telephone Co. has been incorporated by Eugene Row, H. H. Hopple, J. A. Sasser and others.

Thomaston—Electric-light Plant.—The city will establish an electric-light plant or contract with individuals for lights for streets. Address Thad Adams, clerk of council.*

Thomson—Electric-light Plant and Water-works.—The city will issue bonds for erection of electric-light plant and water-works; Ira E. Farmer, mayor.

KENTUCKY.

Greenwood—Coal and Timber Lands.—R. S. Crawford and associates, who recently purchased the Beaver Creek coal and timber lands, are developing the coal property and making arrangements to market the timber.

Louisville—Medicine and Chemical Company.—Dr. B. F. Porter of Lakeland, Fla.; Dr. J. A. Agnew and William A. Smith of Louisville have incorporated the Globe Medicine & Chemical Manufacturing Co., with capital of \$2000.

Louisville—Dental College.—Chartered: The Louisville College of Dentists, capital stock \$42,000, by H. B. Tilesto and others.

Morehead—Oil Well.—Howard McMahan of Parkersburg, W. Va., will drill oil well at Morehead.

Mt. Sterling—Water-works.—The Montgomery Water-Works Co. will construct a system of water-works, furnishing 100 hydrants and erecting a standpipe 150 feet high.

Mt. Vernon—Limestone Quarries.—A company is being organized to develop hydraulic limestone on the property of Dr. A. G. Lovell, near Mt. Vernon.

Owensboro—Cannery.—J. E. Guenther, J. J. Hill, James H. Parrish and others have incorporated the Bluegrass Canning Co. to conduct a general canning business and manufacture catsups, etc.; capital stock \$60,000.

Owensboro—Tobacco Factory.—The Axton-Hilton Tobacco Co. (already established) has incorporated, with capital stock of \$20,000, by W. F. Axton, J. H. Hilton, A. J. Brodie, J. N. Grady and others.

Owensboro—Electrical Machinery Works.—The Kentucky Electrical Co. has increased its capital stock to \$50,000 with a view of doubling output of its lamp department, and adding a department for manufacture of dynamos and motors ranging from one to ten kilowatts, from three-quarters to seven and one-half horse-power; about \$5000 worth of new machinery will be installed.*

Somerset—Oil Refinery.—The Eastern capitalists who recently purchased the property of the Kentucky Oil & Pipe Line Co. have decided to increase the capitalization of the company and incorporate under the laws of New Jersey; they have also decided to build a large oil refinery and will push the work of development. Address for particulars J. P. Hornaday.

LOUISIANA.

Blenville—Cotton Gin.—A cotton gin of three 60-saw gins will be established. Names of interested parties to be announced later.

Crowley—Brick Works.—The Crowley Brick Works are being improved. Address T. J. Toler.

Kansas City, Mo.—Convention Hall.—The Gillette-Herzog Manufacturing Co., E. J. Llewellyn, manager, Minneapolis, Minn., has contract for rebuilding the burned Convention Hall at Kansas City.

Louisville, Ky.—Business Block.—J. Bacon & Sons are having plans made by Clarke & Leomis for the erection of a five-story iron, enameled brick and stone business block, to be fireproof and have electric plant; cost \$75,000.

Macon, Miss.—Courthouse.—Jett Bros. of Mobile, Ala., have contract for erecting \$22,850 courthouse at Macon; W. Chamberlin & Co., Knoxville, Tenn., architects.

Macon, Miss.—School.—The city will erect a two-story brick schoolhouse to cost about \$15,000; contractors and builders may address Hon. A. T. Dent.

Macon, Miss.—School.—The Agricultural and Mechanical College of Mississippi will erect a \$30,000 textile school and \$10,000 dormitory. Address R. C. King, secretary.

Meridian, Miss.—Jail.—A new jail will be built. Address "County Clerk."

Monroe, N. C.—Church.—Presbyterian congregation will erect new church to cost \$800. Address Dr. J. A. Austin.

Montgomery, Ala.—Depot.—The Louisville & Nashville Railroad Co. has had plans made for a depot at Jackson's Lake; J. G. Metcalfe, general manager, Louisville, Ky.

New Orleans, La.—Hotel.—It is reported that a 10-story hotel will be erected. Address secretary Board of Trade.

New Orleans, La.—Hotel.—The New St. Charles Hotel will be improved; new elevators will be installed, electric plant and pumping capacity will be increased, and an eight-inch well, with air compressor, etc., will be sunk; estimated cost of improvements \$85,000.

Oceanview, Va.—Church.—John Pierce of Norfolk has contract for erection of a \$10,000 church building at Oceanview.

Selma, Ala.—Church.—First Methodist Church will erect new edifice. Address "The Pastor."

Thibodeaux, La.—Convent Building.—Emile D. Frederick of New Orleans has prepared plans and J. C. Corbin, Jeanerette, La., has received contract for erection of the new Mt. Carmel Convent at Thibodeaux; it will be of brick, 140x60 feet, and heated with hot air.

Trenton, Tenn.—Residence.—J. Freed will build residence after plans by W. Chamberlin & Co., Knoxville.

Trenton, Tenn.—Residence.—Dr. T. J. Hapel will build residence after plans by W. Chamberlin & Co., Knoxville.

Tyler, Texas.—Office Building.—The Cotton Belt & Northern Railroad will erect office building at Tyler; estimated cost \$50,000; William Carlisle, general manager, Atchison, Kans.

Valdosta, Ga.—Hotel.—A \$50,000 hotel will be erected. Address Maj. J. O. Varmedoe.

RAILROAD CONSTRUCTION.

Railways.

Alexandria, Va.—The Ballston Railway Co. has been formed, with \$50,000 capital stock, by J. W. Carlin and others of Alexandria.

Anniston, Ala.—A correspondent of the Manufacturers' Record writes that the proposed railroad between Jacksonville and Anniston will probably be an extension of the East & West Railroad. George P. Ide of Jacksonville, Ala., is one of the promoters of the plan, in which it is understood that Eugene Kelly, one of the owners of the East & West Railroad, is also interested.

Apex, N. C.—Another survey is being made in the interest of the Cape Fear & Northern Railroad from Duketon to the Cape Fear river near Lillington, N. C. J. C. Angier at Apex, N. C., is general manager.

Beaumont, Texas.—It is reported that the Old Colony Construction Co. of Boston, Mass., has secured a contract for the proposed extension of the Gulf, Beaumont & Northern Railroad from Rogan, Texas, to San Augustine, a distance of sixty-five miles. John H. Kirby at Houston, Texas, is president of the railroad company.

Bristol, Tenn.—The branch of the Holston Valley Railroad recently noted is to extend into timber land recently purchased by the lumber company operating in connection with the railroad company. The Manufacturers' Record is informed that the extension will not be constructed for some time.

Charlottesville, Va.—The Russell Fork & Eastern Railway Co. has been incorporated by A. S. Buford, D. H. Gordon and others of Richmond.

Chattanooga, Tenn.—The last report concerning the Chattanooga Southern Railway is to the effect that the line may be extended from Gadsden, Ala., its present terminus, to what is known as Lock 3, where it will connect with the East & West Railroad. The extension would be about twelve miles in length. M. F. Bonzano at Chattanooga is general manager.

Chesapeake City, Md.—John Banks, one of the promoters of the railroad between Chesapeake City and Cherry Hill, writes the Manufacturers' Record that the company has not been organized as yet. It includes a number of local parties. The sum of \$58,000 held in the State treasury can be utilized towards building the road if the company raises \$58,000 additional.

Clifton Hill, Mo.—The Kansas & Texas Railroad Co. has been incorporated in Missouri to build a line from a connection with the Wabash Railroad to Clifton Hill. The road will connect two sections of the Wabash system. The company is capitalized at \$50,000. W. S. Lincoln at St. Louis, Mo., is chief engineer of the Wabash system.

Cumberland City, Ky.—It is stated that New York parties may form a company to build a railroad about five miles long from Cumberland City to the Cumberland river.

Danville, Va.—It is stated that A. M. Arnold of Montvale, Va., is the promoter of a plan to build a railroad from Danville to Buchanan, which will connect the Southern and the Chesapeake & Ohio systems.

Eureka Springs, Ark.—Mr. John Scullin, president of the company building the railroad between Eureka Springs and Harrison, informs the Manufacturers' Record that preliminary surveys have been made for an extension to Yellville, but as yet no decision has been reached as to its construction. Mr. Scullin's address is at St. Louis, Mo.

Grafton, W. Va.—It is stated that Messrs. Wade, Sloan & Co. of Baltimore have secured the contract for building about ten miles of line in West Virginia, which will reach property of the Central Coal Co. and connect it with the Baltimore & Ohio system. Mr. John K. Shaw of Baltimore is president of the coal company.

Hearne, Texas.—It is stated that the contract has been let to Hugh Burns of Taylor, Texas, to construct the extension of the International & Great Northern system from Hearne to Bryan and from Calvert to Marlin. The contract involves about sixty miles of line. Leroy Trice at Palestine, Texas, is general superintendent.

Huntington, W. Va.—The Big Sandy & Cumberland Railroad Co. has been organized, with \$100,000 capital stock, by C. W. Adams and others.

Joplin, Mo.—R. L. Dennison and others are promoting what is termed the Kansas City, Joplin & Little Rock Railroad from Kansas City, Mo., to Little Rock, Ark., by the way of Joplin and Aurora, Mo., and Yellville, Ark.

Laurel Hill, Ala.—The proposed railroad to be built by the Yellow River Lumber Co. has been surveyed, and it is understood that work is to begin at once. It is to be completed between Wood and Troy, Ala., a distance of about fifty miles. E. E. Reese at Laurel Hill is general manager of the company. About eight miles are under construction.

Monterey, Tenn.—It is stated that a company has been formed to build a railroad from Rugby Road, on the Cincinnati Southern system, to Monterey. The estimated length is forty miles. Robert Walton at Rugby is one of those interested in the plan.

Natchez, Miss.—A correspondent of the Manufacturers' Record writes that the business men are endeavoring to induce the Illinois Central to build a line from its Mississippi Valley division to Woodville, Miss., which will give Natchez a shorter route to New Orleans.

New Orleans, La.—The New Orleans & Northeastern Railroad Co. is relaying its track for a distance of twenty-nine miles with 75-pound rails. The improvement is nearly completed.

Paint Rock, Tenn.—It is reported that Gaunt Crebs and H. M. Noel of St. Louis have given up the idea of completing the Gurley & Paint Rock Railroad, but will build an independent line from Paint Rock along the valley of this name a distance of thirty-five miles. Surveys are to be made immediately.

Parkersburg, W. Va.—The Ohio River Railroad Co. is relaying a portion of its line with heavier rails and has recently secured 1000 tons for this purpose. George A. Burt at Parkersburg is general manager.

Petersburg, Va.—The Petersburg & Claremont Terminal & Improvement Co. has been

incorporated in Virginia, with \$10,000,000 capital stock, to build a line from Petersburg to Claremont. The estimated length of the road is twenty-five miles.

Quitman, Ga.—Final surveys are now being made for the extension of the South Georgia Railroad from Quitman to Tampa. J. W. Oglesby at Heartpine is president of the company.

Roanoke, Va.—It is announced that about fifteen miles of additional track are now being constructed at various points along the Norfolk & Western, while thirty-seven bridges are being rebuilt or improved. Charles S. Churchill at Roanoke is engineer.

San Jacinto, Texas.—W. C. Campbell and T. M. Campbell of Temple, Texas, are interested in the San Jacinto & Southern Railway Co., which has been chartered with \$50,000 capital stock to build a road from San Jacinto to Cypress Station. The line will extend from the Gulf, Colorado & Santa Fe to the International & Great Northern system, intersecting the Houston & Texas Central. Its total length is estimated at twenty-seven miles.

Selma, Ala.—It is stated that the Louisville & Nashville Railway Co. has determined to construct an extension between Selma and Camden, and that a contract has been let. The distance is thirty miles. R. Montfort at Louisville, Ky., is chief engineer.

Shenandoah, Va.—The Virginia Northern Development & Railway Co. has been incorporated, with \$50,000 capital stock, by D. W. Flickner of Roanoke, J. H. Ferguson of Goshen, Va., and others.

Tarboro, N. C.—It is stated that about eight miles of the East Carolina Railroad, now under construction between Tarboro and Snow Hill, have been completed. This road is being promoted by a company of which H. C. Bridgers at Tarboro is president. It will be about twenty-six miles long.

Trappe, Md.—Officials of the Pennsylvania Railroad have been examining the right of way for the proposed extension from Trappe Station to Trappe.

Waldron, Ark.—It is announced that the Arkansas Southern Railroad, now being built between Fort Smith and Waldron, is to be extended to Hot Springs. The terminal points of the line are to be Wagoner, Ind. Ter., where connection will be made with the Missouri Pacific and the Missouri, Kansas & Texas and Hot Springs. It is stated that the rails for the section between Fort Smith and Waldron have already been purchased. C. C. Godman at Fort Smith is president of the company.

Waynesboro, Miss.—A correspondent of the Manufacturers' Record writes that a charter has been granted and preliminary surveys made for the proposed road between Waynesboro and a point on the Gulf coast. It is stated that the Gulf & Ship Island Railroad Co. is interested in the plan. J. R. Pitts of Waynesboro, is president of the company, and W. E. Evans of Seranton, vice-president.

Street Railways.

Anderson, S. C.—The Anderson Water, Light & Power Co. has asked for a franchise from the city authorities to build an electric street railroad, which may be extended to Piedmont and other manufacturing towns in the vicinity.

Hot Springs, Ark.—W. J. Manthe of De Soto, Mo., and Louis Schafer of St. Louis propose building an incline railroad up West mountain, in the suburbs, to reach a resort which will be located on the top. The franchise for the road is controlled by Geo. W. Baxter.

Petersburg, Va.—It is stated that the Southside Railway & Development Co. will expend about \$100,000 in its proposed extensions and other improvements.

Savannah, Ga.—It is reported that the Vernon Shell Road Co. is considering a plan to build an electric line upon the thoroughfare which it controls; also several of the streets within the city limits. Messrs. Twigg & Oliver are attorneys for the company.

West Virginia Coal Property.—As is well known, West Virginia is plentifully supplied with coal-bearing lands. One tract of this nature consists of 10,000 acres underlaid with several seams of the best coking, gas, splint and other coals. This is partly developed, its daily capacity being 750 tons of coal and 200 tons of coke. Facilities for shipping by rail or water are at hand, and the plant can be largely increased at comparatively small outlay. For special reasons this mining property is offered for sale. Those desiring particulars should address "P," care of this publication.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Machinery.—T. J. Lovvorn, Newell, Ala., is in the market for a light threshing machine.

Automobile Manufacturers.—Fairfax Land, Insurance & Investment Co., Fairfax, Va., wants names of manufacturers of automobiles.

Beltting.—See "Lumber Mills."

Boiler.—Wanted.—A 125-horse-power Scotch marine tubular boiler. Apply to steamer "Manatee," Biloxi, Miss.

Boiler and Engine.—See "Saw-mill."

Boiler and Engine.—Rogers & Calloway, Cornelia, Ga., are in the market for boiler and engine.

Boiler and Engine.—C. M. Perkey, Wise, Va., is in the market for second-hand boiler and engine, twelve horse-power.

Boiler and Engine.—The River Oil Co., Tarboro, N. C., is in the market for a small second-hand hoisting engine and boiler.

Boiler and Engine.—David F. Armstrong, McKinley, N. C., wants prices on second-hand 50-horse-power engine and 60-horse-power boiler.

Boiler and Engine.—Suffolk Peanut Co., Suffolk, Va., is in the market for new or second-hand 50-horse-power engine and 60-horse-power boiler.

Boiler and Engine.—Basic Furniture Co., Basic City, Va., is in the market for second-hand horizontal tubular 85-horse-power boiler and 85 to 100-horse-power engine.

Boilers and Engine.—Hawkeye Mining Co., E. Pless, Oologah, Ind. Ter., wants boilers of forty horse-power and an 80-horse-power engine.

Brewery.—Chesapeake Brewing Co., G. Clark Polk, secretary, Baltimore, Md., wants to purchase brewery equipment, including engine, ice plant, etc.

Brick Machinery.—Carolina Portland Cement Co., Peyre G. Hanahan, manager, Charleston, S. C., is possibly in need of brick machinery.

Bridge.—E. R. Monroe, Coles Ferry, Va., wants estimates on an iron roadway bridge 400 feet long, two spans of 200 feet each, to be built across the Staunton river at Clarkton, Va.

Building Material.—J. F. Barbour & Co., Roanoke, Va., want prices on all kinds of building materials.

Building Material.—George Wilson Stewart, No. 309 Temple Court, Atlanta, Ga., wants catalogues of building materials, etc.

Building Material.—The Chesapeake Brewing Co., G. Clark Polk, secretary, Baltimore, Md., wants to purchase building material, including structural iron, etc.

Building Material.—P. C. Dukes, Branchville, S. C., wants to purchase tin shingles.

Building Material.—Jett Bros. of Mobile, Ala., want to correspond with manufacturers of building material.

Calcing Machinery.—Joseph Hull, Atlanta, Ga., wants machinery for calcing ochre, also for grinding ochre in oil for the manufacture of paint.

Canning Machinery.—Judson Strock, Clanton, Ala., wants to correspond with manufacturers of canning machinery.

Car Wheels.—Petersburg Iron Works Co., Petersburg, Va., wants immediate quotations on carload lots cast scrap and old car wheels.

Concentrating Plant.—See "Mining Equipment."

Cotton Compress.—See "Oil Mill."

Cotton Ginnery.—See "Oil Mill."

Cotton Mill.—Anniston Yarn Mill, J. T. Gardner, general manager, Anniston, Ala., wants proposals on machinery and construction of \$100,000 cotton mill (5000 spindles for yarn).

Cotton-mill Contractors.—W. G. Nunn, manager Ladonia (Texas) Cotton Oil Co., wants names of cotton-mill builders.

Cotton-oil Mill.—The Giddings Cotton Oil Co., Giddings, Texas, will open bids April 16 for a 40-ton oil mill, all machinery complete, as per specifications on file in First National Bank. Bids to be accompanied by certified check for \$500; \$3000 bonds required and usual rights reserved.

Electrical Machinery.—W. K. Henderson Iron Works, Shreveport, La., is in the market for a dynamo of 100 lights.

Electric-light Plant.—The city of Thomas-ton, Ga., solicits propositions for the erection of an electric-light plant or to contract with individuals for lights for streets. Address Thad Adams, clerk of council.

Electric Lighting.—Theophilus B. Anderson, city clerk, Palatka, Fla., advertises for bids for lighting the city for a term of five years; council reserves the usual rights.

Engine.—H. W. Graves, Arlington, Ga., wants to buy a 40 or 50-horse-power Corliss engine.

Engine.—W. A. Lillier, Keyser, W. Va., is in the market for a gasoline engine of about eight horse-power.

Engine.—Catawba Cotton Mills, Newton, N. C., wants a new 125-horse-power Corliss engine, to be delivered June 1.

Fertilizer Mill.—See "Oil Mill."

Furniture Machinery.—See "Woodworking Machinery."

Gasoline Engine.—See "Engine."

Grinding Machinery.—See "Calcing Machinery."

Holisting Equipment.—See "Boiler and Engine."

Ice Plant.—Monticello Ice Co. is in the market for new or second-hand 10-ton ice plant, not including steam-power. Address care of Windes Lumber Co., Hamburg, Ark.

Ice Plant.—See "Brewery."

Lumber Mill.—Blades Lumber Co., Elizabeth City, N. C., is in the market for surface, hangers, rip saws, pulleys, shafting, belting and all necessary equipment for planing mills.

Machine Tool.—John G. Duncan, Knoxville, Tenn., wants 16-inch by 8-foot bed second-hand iron lathe (dealers' prices).

Machine Tools.—The Kentucky Electrical Co., Owensboro, Ky., will be in the market for 32-inch by 12-foot lathe, 30-inch by 30-inch by 8-foot planer, power stamping press to cut disks to sixteen and one-half inches in diameter, notching press for notching armature disks, squaring shears for cutting light iron.

Machine Tools.—W. K. Henderson Iron Works, Shreveport, La., is in the market for new tools.

Machine Tools.—Chas. R. Howard, 71 Piedmont avenue, Atlanta, Ga., wants to correspond with manufacturers of automatic steam-heat lathe benders, lathes, three-bit mortiser, three-bit boring machine, etc.

Mining Equipment.—Port Royal Zinc Mining Co., Chas. H. Rider, secretary, St. Louis, Mo., is in the market for drilling machines and a crusher.

Mining Equipment.—William M. Slater, 1205 Thirteenth street N. W., Washington, D. C., wants addresses of manufacturers of machinery for pulverizing ores to a size that will run through at least a 100-mesh screen.

Mining Equipment.—Hawkeye Mining Co., E. Pleas, president, Oologah, Ind. Ter., is in the market for 100-ton concentrating plant and saw-mill rigging.

Molds.—D. F. McMullan, Frostburg, Md., wants to purchase molds for small pin cushions (with hollow into which a plush cushion is placed).

Oil Mill.—Joel Bailey, Farmers' Oil Mill, Greenwood, S. C., wants complete outfit for 20-ton cotton-oil mill; also wants battery of four 70-saw gin and press.

Oil Mill.—Anthony Truckers' Union, Anthony, Fla., will want machinery for extracting oil from velvet beans; will also want fertilizer machinery.

Paint Machinery.—See "Calcing Machinery."

Planing Mill.—See "Lumber Mill."

Pulleys and Shafting.—See "Woodworking Machinery."

Pulverizing Machinery.—See "Mining Equipment."

Quarriers.—I. J. Smith, Alleghany Inn, Newport News, Va., wants addresses of blue and limestone quarriers.

Railway Equipment.—Greenleaf Johnson Lumber Co., 405 East Falls avenue, Baltimore, Md., wants 100 tons 25-pound second-hand rails.

Railway Equipment.—Windes Lumber Co., Hamburg, Ark., is in the market for three miles 20-pound steel rails and four switches and frogs, locomotive weighing twelve to

sixteen tons for logging purposes and ten logging cars.

Rope Machinery.—See "Textile Machinery."

Saw-mill.—See "Mining Equipment."

Saw-mill.—F. Hammond, Martinsville, Ill., wants saw mill (capacity 15,000 to 25,000 feet), boiler, sixty horse-power, and 50-horse-power engine.

Saw-mill.—J. Wistor Evans, Old Fort, N. C., is in the market for new or second-hand portable saw-mill, capacity from 5000 to 10,000 feet per day; 60-inch circular saw, 30 to 35-horse-power boiler and 20 to 25-horse-power engine. Wants prices f. o. b. Old Fort.

Saw-mill Machinery.—Mackie Lumber Co., Piedmont, W. Va., may possibly want some machinery.

Saw-mill Machinery.—A. J. Gilbert, Eu-faula, Ala., wants to buy a saw table, with shaper attachment, for working three-eighths lumber, same to be operated by steam-power.

Scrap.—See "Car Wheels."

Sewer.—R. C. Richardson, clerk, Ashland, Ky., will receive sealed proposals until April 30 for construction of Twenty-first-street sewer, according to plans and specifications on file in city engineer's office. Bids will be received for furnishing the material and completing the work combined, or for either separately.

Shafting and Pulleys.—See "Lumber Mill."

Showcase Fixtures.—J. S. Starr, Rock Hill, S. C., wants to correspond with manufacturers of showcase fixtures, such as corner clips, spring hinges, door pulls, brass sliding rails, shelf bracket and name plates.

Street Paving.—W. T. Brooke, city engineer, Norfolk, Va., will open proposals April 25 for paving Park and Brambleton avenues in Brambleton ward. Forms of proposals, specifications and instructions to bidders may be obtained at city engineer's office. Certified check for \$1000 must accompany each bid. Usual rights reserved.

Textile Machinery.—J. H. Miller, P. O. Box 122, Temple, Texas, wants to correspond with manufacturers of machinery for making rope.

Tim Shingles.—See "Building Material."

Water-wheels.—Julius Ivey, Bizzell, N. C., wants addresses of manufacturers of turbine water-wheels.

Well-boring.—Board of control of Mississippi Penitentiary desires to buy outfit for boring artesian wells. Address Gov. A. H. Longino, Jackson, Miss.

Woodworking Machinery.—C. M. Perkey, Wise, Va., is in the market for second-hand planer and matcher.

Woodworking Machinery.—The Keystone Handle Co., Madison, Ga., is in the market for an automatic fork-handle lathe.

Woodworking Machinery.—McColl Novelty Works, McColl, S. C., wants complete outfit of woodworking machinery.

Woodworking Machinery.—Ernest Clapp, Whitsett, N. C., wants addresses of manufacturers of woodworking machinery.

Woodworking Machinery.—W. A. Lillier, Keyser, W. Va., wants to buy pony planer, jointer, shaper, rip saw, rip and cut-off saw, band saw, emery grinder, etc.

Woodworking Machinery.—W. M. Absher Co., North Wilkesboro, N. C., wants second-hand dresser and matcher to dress lumber 4x5 inches on four sides; also some two-inch shafting and pulleys.

Woodworking Machinery.—Branchville Furniture & Manufacturing Co., Joe A. Berry, secretary, Branchville, S. C., wants to correspond with manufacturers of machinery for making furniture.

TRADE NOTES.

Hotel Sale.—Geo. C. Smith of Milledgeville, Ga., offers for sale an established hotel transacting a profitable business.

Cotton-Mill Sale.—The Hodgson Cotton Co. of Athens, Ga., offers for sale a complete cotton mill. The plant was built at a cost of \$17,000, and is equipped throughout with modern machinery.

Fraser & Chalmers.—The machinists' strike at the shops of Messrs. Fraser & Chalmers at Chicago has ended. The men have returned to work, and all orders with the firm will be filled promptly.

McEwen Engines.—E. B. Tyler of Nashville, Tenn., Southern representative of the Ridgway Dynamo & Engine Co. of Ridgway, Pa., has closed contract to furnish an engine to the city of West Point, Ga. This will be of the McEwen type, as made by the Ridgway Company.

George Wilson Stewart, Architect.—George Wilson Stewart, architect of the late firm of Golucke & Stewart at Atlanta, Ga., has opened offices in Nos. 300 and 311 Temple Court. Mr. Stewart will be pleased to receive manufacturers' travelling men and catalogues of building materials generally.

Cotton Mill Offered.—A public sale of the Paris (Tenn.) Manufacturing Co.'s cotton mill will be held on May 7, as ordered by court decree. Plant is fully equipped with 1500 spindles, etc., for producing 5000 pounds daily, and it is valued at \$15,000. John R. Rison, clerk and master, can give information.

Abbe Manufacturing Co.'s Office.—The Max P. Abbe Manufacturing Co. of New York city announces that the increasing volume of its business has necessitated securing more commodious offices. Accordingly, the company has removed to 220 Broadway (the St. Paul Building), where correspondence should be addressed in future. The Abbe Company is designer and builder of special machinery, pebble mills, rotary and stationary dryers, root cutters, centrifugals, etc.

Louisiana and Mississippi Timber Lands.—Hardwood and pine timber lands, 1,000,000 acres in extent, are offered for sale by a New York firm. The property in question is estimated to cut 5000 feet to the acre, while the soil is unusually fertile, comprising some of the richest alluvial lands in the Mississippi valley. Another tract offered is of 15,000 acres, located in Louisiana. This is long-leaf pine timber land. Messrs. Atwood Violett & Co. of 30 Broad street, New York city, offer these properties, and will furnish any desired information. (See their advertisement.)

For a Bleaching and Finishing Plant.—Those versed in Southern textile information know that this section does but little bleaching and finishing of textile goods. There are several bleacheries, but they handle almost entirely only goods produced by mills with which they are connected. An advantageous location for a bleaching and finishing plant is at Fayetteville, N. C. Near this city can be found an abundance of absolutely chemically-pure water, filtered by nature in its percolation through sand hills. A site for such a plant is offered for sale by Messrs. W. L. Holt and W. M. Morgan, either of whom can be addressed for particulars. See their card in advertising columns.

Textile Instruction.—Among recent enrollments as students of the American Correspondence School of Textiles are names of men holding responsible positions in mills in Spain, Japan, England, India and Canada, as well as from every textile-manufacturing State in the United States. The opportunity of obtaining a thorough textile education in any or all of such branches as mill arithmetic, calculations, designing, picking, carding, weaving, mill engineering, etc., is meeting with the approval of millmen generally, and many commendations are being received. The school is meeting with approval, especially in the South, where clubs are being formed in many of the mills for the purpose of studying, as many as ten students being enrolled from one mill. This practically gives each mill the advantage of having a textile school connected with it, as the machinery in the mill can be used for reference, and the members of the club help one another with their lessons, thus forming a mutual textile school. Address catalogue department of American Correspondence School of Textiles, New Bedford, Mass.

Distributing Depots for "Lythite."—The constantly-increasing demand for "Lythite" throughout the country has caused the maker of it to establish distributing agencies in all sections. This demand increased so that by reason of distance from the source of supply dealers and users were compelled to wait many days for shipments which they desired to have on short order. "Lythite" is the well-known cold-water paint of the Frank S. De Ronde Co. of 54 John street, New York city. The new depots referred to are Messrs. Peden & Co. of Houston, Texas, to sell throughout their State; the Kansas City (Mo.) Roofing & Corrugating Co., general Southwestern distributors; the Asphalt Roofing Co. of 708 South Theresa avenue, St. Louis, Mo., general selling agency; the Adams & Elting Co. of 155 Washington Boulevard, Chicago, general Western and Northwestern distributing depot; E. E. Eagen, 1015 Prudential Building, Atlanta, Ga. These representatives are all prepared to supply "Lythite" at short notice in quantities to suit. They are well qualified to take care of and increase the large de-

mand for this cold-water paint that has attained such an excellent reputation with consumers.

Lubrication in Factories.—There are many factors that enter into the economical operation of the numerous kinds of machinery used in modern industrial plants. It is the combination of these factors that makes the saving wherein frequently the dividend reposes and is brought to the surface. Lubrication is one of these factors. Its importance no wide-awake factory manager or machine operator will overlook. Various kinds of oils and greases are used in the lubrication of the machinery of the industrial world. Among the greases is that manufactured by the Keystone Lubricating Co. of Twentieth and Allegheny avenue, Philadelphia, Pa. This company's greases have met with a success that has assisted in heralding their merits. Letters from users of Keystone greases speak in the highest possible terms of the results produced. Those who have most recently written the company in this commendatory vein are the American Pottery & Fire-Brick Works of Philadelphia; H. N. Sims, mining and geological engineer of Altoona, Pa.; Newell Mill Co. of Seattle, Wash.; V. J. Dahl, boiler inspector of Los Angeles, Cal., and Chapman Manufacturing Co. of Burlington, Vt. It will be noted that these concerns are located in all sections of the United States, and that they are representative ones in their class. The Keystone Lubricating Co. will send trial package of its greases. Full set of brass cups are furnished with first purchase. Further particulars may be obtained on application.

TRADE LITERATURE.

Gin-Saw Filer.—Ginners throughout the South find the saw filer one of the indispensable adjuncts of their cotton-ginning plants. The Bradley saw filer is a device that has been on the market for several years, this being its third season, and the wide usage which has followed its introduction speaks volumes in favor of its merits. Over 2500 of these filers have been sold in the cotton-growing States. Messrs. C. A. Richardson & Co. of Waco, Texas, manufacture the Bradley gin-saw filer, and their booklet tells of the convenient advantages the filer gives its owner. Send for booklet.

"St. Louis Corliss."—The most important factor of a satisfactory steam plant is the engine. On choosing an engine, therefore, users are wont to exercise the utmost care to obtain one that has been a success. The "St. Louis Corliss," made by the St. Louis (Mo.) Iron and Machine Works, is an engine of the successful class referred to. The manufacturer issues a catalogue of this engine and gives a thorough description of it, together with addresses of many manufacturers and others who have in the past found the "St. Louis Corliss" a strictly first-class and reliable machine. Catalogues on application.

Automatic Turret Lathe.—Ironworkers, founders, machinists and those in kindred lines who find use for lathes should be interested in the semi-automatic turret lathe. This tool is built upon the most modern plans, and has had much success in some of the most important industrial establishments in this country. One prominent firm, the Pennsylvania Iron Works Co. of Philadelphia, has just ordered three of these lathes, one 40-inch and two 24-inch, for immediate delivery. The American Turret Lathe Co. of Wilmington, Del., manufactures these lathes, and its most recent leaflet tells of its 40-inch semi-automatic turret lathe. Messrs. Markt & Co., Ltd., of 193 West street, New York, are general agents for the tool.

Mechanical Rubber Goods.—Possibly no one line of goods in the mechanical world is more widely used than that which has rubber, either in whole or in part, as a basis. Mechanical rubber goods find their usage throughout the world in industrial plants of every size and character, while other rubber goods, not strictly mechanical, yet products of the same manufacturers, find their way into general business establishments and into households. Users of such rubber goods as mentioned are, it is presumed, always prepared to have their attention attracted to superior productions in that line. Such is the line offered by the Peerless Rubber Manufacturing Co. of 16 Warren street, New York city, and of which the company's new catalogue, dated March, 1900, gives full particulars. The goods are most comprehensive, including gaskets, bib valves, belting, water and steam hose, discs, diaphragms, buckets, packing for all purposes, mats, etc. Send for catalogue.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

New Banks in West Virginia.

Applications for national bank charters in West Virginia include the following towns: Marlinton, Alderson, Ronceverte, Parkersburg, Weston, Moundsville, St. Marys, New Martinsville, Morgantown and Kanawha. Four of these applications have been approved by the comptroller of the currency, two being for new banks and two for the conversion of State banks into national banks. The new banks are the First National Bank of Marlinton, capital \$25,000, blanks sent to F. R. Hunter, Marlinton, and the First National Bank of New Martinsville, capital \$50,000, S. Bruce Hall, president. The reorganized banks are the First National Bank of Ronceverte, formerly the Bank of Ronceverte, capital \$30,000, John W. Harris, John T. Dixon, W. D. Slayen, directors, and the First National Bank of Moundsville, formerly the Marshall County Bank of Moundsville, capital \$50,000.

New Corporations.

Mr. J. S. M. McKamey of Gregory, Texas, is preparing to open a private bank at that place.

F. Story is president, H. E. Eastland, vice-president, and H. H. Watts, cashier, of the bank recently formed at Forest, Miss.

T. Burwell Green and others are interested in the National Bank being formed at Washington, Ga., with \$25,000 capital stock.

The Pulaski & Giles Insurance Co. has been organized at Pearisburg, Va., with \$500,000 capital stock, by F. B. Thrasher and others.

The bank recently organized at Camden, Tenn., will begin business on May 7. H. F. Stegall and T. J. Dodd are among the directors.

John T. Wright of Palestine is interested in the proposed national bank to be organized at Tyler, Texas, with \$100,000 capital stock.

The Wiley-McKenzie Banking Co. of Groesbeck, Texas, has decided to establish branches at Jewett and Oakwoods, in the same State.

The Little Rock Mutual Investment Co. of Little Rock, Ark., has been incorporated, with \$10,000 capital stock. L. R. Hill is president.

R. B. Smyer is interested in the North Birmingham Investment Co., recently organized at North Birmingham, Ala., with \$15,000 capital stock.

The Guaranty Loan Association, recently organized at Anderson, S. C., has been commissioned to do business. J. J. Fretwell is president.

The South Atlantic Life Insurance Co. has been organized at Richmond, Va., with \$300,000 capital stock, by T. Atkinson, B. B. Munford and others.

D. W. Bagley and L. M. Lamb are reported as interested in the Mutual Homestead Fire Insurance Association, recently incorporated at Norfolk, Va.

Authority has been given the State National Bank of Taylor, Texas, to begin business with \$50,000 capital. Robert H. Eanes is president, and H. T. Kimbre, cashier.

The City National Bank of Colorado, Texas, has been authorized to begin business with \$60,000 capital. William R. Smith is president, and John E. Hooper, cashier.

The stockholders of the Bank of Bay Biscayne at Miami, Fla., have decided to secure a national bank charter under the title of the First National Bank of Miami. It will be capitalized at \$50,000.

The Maryland legislature has passed bills to incorporate the Citizens' Trust & Deposit Co.; also the Consolidated Trust & Finance Co., the Trust & Deposit Co., the United Deposit & Fidelity Co., the Calvert Banking & Trust Co., the United Trust Co., the Montgomery Title & Insurance Co., the State Trust & Deposit Co. and the Annapolis Banking & Trust Co.

New Securities.

Charles H. Coffin of Chicago has purchased the issue of \$8000 in 5 per cent. bonds of Thomasville, Ala., at par.

Bids will be received until April 25 for the issue of \$2000 in bonds of Anderson, S. C. J. K. Hood, mayor, may be addressed.

George T. Gibbon of Charleston, S. C., has purchased the issue of \$9500 in 4½ per cent. refunding bonds of Greenville, S. C., at 106.90.

The Birmingham Belt Railroad Co. will hold a meeting on May 5 to consider the issue of \$1,500,000 worth of bonds for various purposes.

A correspondent of the Manufacturers' Record writes that the town of South Boston, Va., has disposed of its recent bond issue at par.

Messrs. Dick Bros. & Co. of Philadelphia have purchased \$10,000 worth of bonds of Cambridge, Md., bearing 5 per cent. interest at 107.55.

The city of Natchitoches, La., will vote on the question of issuing \$30,000 in 5 per cent. bonds for improvements on April 27. Address the mayor.

Bids will be received until April 20 by the commissioners of the sinking fund for the issue of \$490,000 in 3½ per cent. refunding bonds of Louisville, Ky.

An issue of \$10,000 in 4 per cent. bonds of Foard county, Texas, is reported to be on the market. The county treasurer may be addressed at Crowell, Texas.

It is probable that the issue of \$10,000 in bonds of Baird, Texas, school district will be placed on the market in June next. R. B. Russell at Baird may be addressed.

The school district of Pembroke, Ky., has voted in favor of issuing \$7500 in bonds for school purposes. The board of commissioners at Pembroke may be addressed.

The town of Wadesborough, N. C., will sell its issue of \$25,000 in 5 per cent. bonds on April 18. Bids will be received by John D. Leak, chairman of the finance committee.

Messrs. Haden & Barley have purchased \$45,000 worth of bonds of Botetourt county, Virginia, at par and accrued interest. The bonds bear 5 per cent. interest.

The town of Laurel, Md., has voted in favor of issuing \$35,000 in bonds for water-works. There is a possibility that \$10,000 in additional securities may be sold also for improvements. The mayor may be addressed.

The bonds to be issued by Hamblen county, Tennessee, will be sold at a rate of interest not to exceed 5 per cent. The amount of the issue is \$10,000. The commissioners' court may be addressed at Morristown, Tenn.

Bids will be received until April 21 for the issue of \$10,000 in 5 per cent. bonds of Elizabeth City, N. C. The bonds are intended for street improvements. J. L. Sawyer, J. B. Flora and T. B. Wilson form the committee in charge.

The executive committee of the Baltimore & Ohio Railroad Co. has decided in favor of selling \$8,400,000 worth of com-

mon stock, giving the preference to the present security-holders. This stock is at present held in the treasury.

Dividends and Interest.

The New Orleans Water-Works Co. has declared a dividend of \$2 per share.

The Marion Central Bank of Marion, Ala., has declared a dividend of 10 per cent. annual.

The American Car & Foundry Co. of St. Louis, Mo., has declared a quarterly dividend of 1½ per cent.

The Choctaw, Oklahoma & Gulf Railroad Co. announces a semi-annual dividend of 2½ per cent. on the preferred stock and 2 per cent. on the common stock.

Financial Notes.

The Colonial Trust Co. of Baltimore has re-elected its present officers. J. Henry Ferguson is president.

The First National Bank and the Commercial and Farmers' National Bank of Baltimore, it is reported, will be consolidated, with Lawrence B. Kemp as president.

The National Bank of Dallas, Texas, and the National Exchange Bank of the same city have been consolidated under the title of the latter corporation. Royal A. Ferris is president, and E. M. Reardon, vice-president, of the consolidated bank.

Electrical Wiring. By Cecil C. Poole. Publisher, the Power Publishing Co., New York. Price \$1.

In the preparation of this volume it was taken for granted that the readers would be familiar with Ohm's law, with the relation between the size of a conductor and its resistance, and with electrical terms generally. It is designed to serve both as an instructor for practical wiremen who have occasion to lay out their own work, and as a convenient and general reference book for electrical engineers whose work includes the calculation of transmission circuits. It is an effort by the author to explain the computation of wiring to the uninitiated, and to present in shape for convenient reference tables and formulas for the use of competent engineers. The tables, which include those for alternating current motors and those showing the corrected drop in inductive circuits, which are believed to be the only ones of the kind ever published, have been computed from fundamental principles, and their accuracy has been carefully verified. The publication should prove of great value to practical electricians.

No. 1 of Volume II of the proceedings of the Engineering Association of the South, whose headquarters are at Nashville, Tenn., contains papers by Hunter McDonald on "Painting Railroad Bridges," by William M. Leftwich, Jr., on "Approaches to the Viaducts on Church and Broad Streets, Nashville, Tenn.," and by E. C. Lewis on "The Nicaragua and Panama Canal Routes."

New Orleans' Leading Hotel.

The South has been noted for the excellence of its public hostleries. As modern thought has improved the construction of such buildings the leading Southern cities have kept in the van and built structures of this character. The New St. Charles Hotel at New Orleans is one of this highest class hotels, and the conduct of it has always appealed to the tastes of visitors to the Crescent City. After the destruction of the old Charles by fire several years ago a new building arose upon its site that embodies every facility and improvement that has been devised for the comfort and convenience of the traveling public. It is now announced that Messrs.

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Andrew R. Blakely & Co., proprietors of the New St. Charles, will expend some thousands of dollars for further improvements to their already beautiful establishment. Important features contemplated in the improvements are said to be the addition of an immense assembly hall and ballroom, and the complete rearrangement of the ground floor and numerous additions in various parts of the house. In its new dress the New St. Charles will be excelled by no hotel in its section, and visitors to New Orleans will be assured the best accommodations and culinary services of a character to please the most exacting.